AMERICAN ANNALS OF THE DEAF

Official Organ

Conference of Executives of American Schools for the Deaf
Convention of American Instructors of the Deaf

Edited by

IRVING S. FUSFELD

Under the Direction of

PERCIVAL HALL, of the District of Columbia, 1939
FRANK M. DRIGGS, of Utah, *ex officio*
MADISON J. LEE, of Kentucky, 1939
ELWOOD A. STEVENSON, of California, 1945
IGNATIUS BJORLEE, of Maryland, 1942
ALVIN E. POPE, of New Jersey, 1942
CLARENCE J. SETTLES, of Florida, 1945

Executive Committee of the Conference

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THE CONFERENCE OF EXECUTIVES OF
AMERICAN SCHOOLS FOR THE DEAF

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The Conference of Executives of American Schools for the Deaf, originally the Conference of Superintendents and Principals of American Schools for the Deaf, was founded in 1868 and subsequently incorporated under the laws of the State of Maryland in 1931. The Conference is an organization of the executive heads of schools for the deaf in the United States and Canada, and has for its object "to promote the management and operation of schools for the deaf along the broadest and most efficient lines and to further and promote the general welfare of the deaf."

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The Convention of American Instructors of the Deaf, founded in 1850 and incorporated by act of Congress in 1897, is an organization of educators of the deaf in the United States and Canada with the general object of "promotion of the education of the deaf on the broadest, most advanced, and practical lines," and its chief purpose "to secure the harmonious union, in one association, of all persons actually engaged in educating the deaf in America."

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Contents

CONTENTS

THE THIRTY-FIRST MEETING OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF .....*Elwood A. Stevenson, M.A.* 111

A COMPARATIVE INTELLIGENCE TEST OF GROUPS OF CHILDREN BORN DEAF AND OF GOOD HEARING, BY MEANS OF THE PORTEUS TEST .....*A. Zeckel, M.D., and J. J. van der Kolk* 114

THE DEAF AND THEIR VOCATIONAL PROBLEMS ..*John P. Orr, B.S.* 124

LABOR LEGISLATION AFFECTING THE DEAF . *Alfred E. Stephens, B.A.* 132

RHYTHM AND ITS RELATION TO THE TRAINING OF THE DEAF ....*Gladys G. Jayne, B.A.* 137

MUSIC FOR DEAF CHILDREN .....*Karl Wecker, Mus.M.* 151

EFFECTIVE STUDY .....*Wesley Lauritsen, M.A.* 156

USE OF RADIUM IN PREVENTION OF DEAFNESS .....*I. S. F.* 160

SUMMER SCHOOL OPPORTUNITIES FOR TEACHERS OF THE DEAF 164

MISCELLANEOUS .....*I.S.F.* 171

Room Arrangements for the Convention at Berkeley, 171; Correction, 173; Certification, 173; A Loss to the Horace Mann School, 174; A Young Deaf Poet, 174; Needs of the School Child with Defective Hearing, 175; X-Ray and Radium Treatment for Deafness, 176; School Objectives, 177; The Pennsylvania Conservation-of-Hearing Program, 177; Meeting of the American Academy of Ophthalmology and Otolaryngology, 178; College Opportunities for Blind or Deaf Students in Pennsylvania, 179; Calcutta School's Pupil-Record System, 180; Evening Classes for the Adult Deaf, 180; An Act to Create a State Division for the Deaf, 181; Extension Activities of a School for the Deaf, 183; Defective Hearing Among Drafted Men, 184; *Digest of the Deaf,* 184; *The New York Journal of the Deaf,* 185; The Deaf as Automobile Drivers, 185; German Attitude Toward the Handicapped, 185; Status of Hard-of-Hearing Children in Germany, 186.

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The Thirty-First Meeting of the Convention of American Instructors of the Deaf

BERKELEY, CALIFORNIA, JUNE 18-23, 1939

PLANS are practically completed for the Thirty-First Meeting of the Convention of American Instructors of the Deaf, Berkeley, California, June 18-23, 1939. Everything points to a very interesting and constructive week of activity. Much time and thought have been given to the preparation of the program and plans affecting the meeting, and all express deep satisfaction with the manner in which matters are taking final shape.

The convention will begin Sunday, June 18, at 1:30 P.M., with registration and other necessary preliminaries common to the opening day. All are advised to plan to arrive early Sunday so as to attend to registration and room arrangements. Otherwise, difficulty may be experienced in obtaining rooms. At present, the plan is to provide rooms for 150 ladies in one building and for about 100 men in another. This is as far as the school housing can go. Another 250 to 300 can find room accommodations at the International House, a few squares from the school. For those who prefer other accommodations, several hotels will be available. However, all are strongly advised to make reservations early and to write Mr. Marshall S. Hester, California School for the Deaf, about this matter of rooms. The rooms at the school will be offered at a very reasonable weekly rate.

For the period of the convention, rooms at the International House will cost $2 a night. The Association Summer School at the University begins the Monday following the convention. For this period of six weeks, the International

House has arranged special rates. By acting early, one can reserve a room during the convention and for the six-weeks-period summer school at a cost averaging about $.75 a night. As these rooms are taken up by others who will attend the general summer school session of the university, it would be advisable to write promptly to Mr. Hester regarding this.

The school management will arrange to provide meals for everyone in the school dining room. All are asked to plan to eat their meals at the school. The costs will be reasonable, the meals will be wholesome and good and it is hoped to serve well.

The opening session of the program will be 8:00 P.M., Sunday night, June 18. State, city and county officials will be present that evening. Arrangements have been made to have a very interesting speaker that night. All main meetings are to be held in the new auditorium.

On the following night, Monday, there will be the usual reception and dance. This will be held in the beautiful and spacious International House.

The convention banquet is to be held on Wednesday night. Plans are in the making for this occasion and one of the best speakers of the West has agreed to honor us at that time.

The general program promises to be a very attractive one. Demonstrations have been arranged for each morning of the week. The beginning hour of the daily program has been set at 9 o'clock. The general morning session will be at 11:00 to 12:00, at which time there will be an outstanding educator for the main address. Such speakers and educators as Dr. Paul Cadman, Dr. Olga Bridgman, Dr. Knight Dunlap and Dr. Verne Knudsen are a few of the noted speakers who are to participate in the program.

The regular section meetings are to be held in the morning just previous to the general session. It is planned to hold afternoon sessions beginning at 2 o'clock and lasting for 45 minutes, to be immediately followed by well organized panel discussions on the vital phases of our work.

Most of the evenings have been purposely left open, thus permitting more freedom to the members to do as they wish

at that time. There will be much to see in Oakland, San Francisco and at the World's Fair right at the door.

All teachers should make plans to attend this convention and if possible the summer school purposely arranged at the University adjoining the school. There will be every reason to come because a very attractive California week is assured. Many heads of schools have indicated that members of their staffs who wish to attend the meeting of the Convention will be excused from school duties so they may be free. The success of the meeting will of course depend upon the attendance, so it is urged that all who can will be present.

ELWOOD A. STEVENSON
Vice-President, and Chairman of the Program Committee
Berkeley, California

A Comparative Intelligence Test of Groups of Children Born Deaf and of Good Hearing, by Means of the Porteus Test[1]

By A. ZECKEL, M.D., *Director*
and J. J. VAN DER KOLK, *Collaborator and Head Teacher*
Psychological Laboratory, Institution for the Deaf
Rotterdam, Holland

THE ABSENCE of the perception of sound from birth and the difficulty in learning the spoken language by the deaf and dumb must entail a certain paucity of the conscious capacity. This lack of ideas has as a consequence a modification of the psychic structure of the deaf child with regard to the standard which in later life can be expressed in many ways. We know how the loss of hearing among adults often brings about a series of psychical changes and how that distrust which one usually sees developing in the case of those who have become deaf sometimes leads to a serious psychosis with paranoid delusions and hallucinations. How much greater and deeper, then, and more strongly rooted with the character, must be the change which will gradually occur in the still undeveloped psyche. These slowly developing changes in structure will widen the gap between the child with normal hearing and the normal child who is deaf, especially if he is born deaf, to a gulf which can hardly be spanned. The fact that there are various forms of deaf-mutism necessitates our making a strict selection when carrying out psychological research. If, for instance, we endeavor to solve the problem as to whether the deaf-and-dumb child is equal in talents to the hearing child, we must restrict ourselves to certain forms of deaf-mutism.

Congenital syphilis is already attended with so much damage to the brain tissue that we cannot use the luetic deaf person for the purposes of the question at issue. Likewise, deaf-mutism forming part of another or congenital disease of the brain must also be excluded from this re-

[1] From the Psychological Laboratory of the Institute for the Instruction of the Deaf at Rotterdam.

search. Only congenital deafness not complicated by diseases of the brain, and also deafness which has made its appearance in the earliest years as a result of ear inflammation, accident or other illnesses, can be of use for our study.

The state of disease of the *surdomutitas corticalis,* suggested by Bárczi and Ranschburg, presupposes inferior functioning of the auditory centers in the brain. This form of deaf-mutism, if it exists, should, we think, be accompanied by a number of abnormalities of a psychological nature, which we must encounter also in aphasia and other apparent symptoms of brain diseases. An intelligence test with this possible group of deaf persons is, therefore, quite warranted.

This leads to the second question, *viz.* whether deaf-mutism in itself, apart from the existing poverty of conscious ideas, can cause a diminution of intellectual powers. Various examinations of the intelligence of deaf-mutes have already been made. As can be understood, the various examiners soon found that the extensive intelligence measurements of Binet and Simon and others were, because of the predominant verbal element, unsuitable for forming an idea of the intelligence of the deaf. Pintner and Paterson have made examinations among the deaf on a large scale with group non-verbal tests and also with individual intelligence tests and have found, in general, a mental deficiency of two to three years. Drever and Collins found scarcely one year's deficiency of the deaf. In 1938 Springer carried out a similar investigation with 330 deaf and hearing persons. He utilized the Goodenough man-drawing test. He found no difference of importance between deaf and hearing persons. But he found that the intelligence coefficient of hearing girls was considerably higher than that of all others, even than that of hearing boys. Although there were great differences between hearing boys and girls with regard to intelligence, the I.Q. of the deaf boys and girls was about the same. The average I.Q. of 96.24 proved that deaf children possessed normal intelligence. It is the merit of Herderschêe to have compiled in our country a series of tests for deaf-mutes. In his publication he points out that he proposes by these tests to indicate a method of selecting from among the deaf those children

who are and those who are not suitable for instruction at a school for the deaf. The extent to which this sifting of pupils is a necessity, is a problem in itself. We do not believe, however, that the tests of Herderschêe are really intelligence tests for the deaf. The deaf-mute, according to them, is in advance already reduced to the level of the feeble-minded. If one knows the deaf, one also knows that owing to this idea, which is, alas, still far too popular, the progress obtainable in further life is seriously hampered.

For the purposes of intelligence research we must for the time being make a selection from a series of existing and standardized tests, which are all characterized by the quality that the verbal element is of less importance than in the tests of Binet and Simon, the Terman Stanford Revision and others.

The performance tests, in which something has to be accomplished, are of much greater value for use among the deaf, as they are not based on any knowledge of language worth mentioning. From these tests we have chosen the maze test of Porteus for our first orientation examination. Although the Porteus Test has been standardized in America on a large scale, we have, in addition to the deaf children, examined an equal number of hearing children of the public elementary schools in order to be able to make a better comparison. We very much appreciate the co-operation of Mr. J. A. Nooteboom, inspector of elementary education at Rotterdam and also of the heads of the various public elementary schools concerned.

We have tested as many definite hereditary forms of deaf-mutism as possible, and wherever there seemed to be the slightest chance that we were dealing with acquired deaf-mutism, we excluded such cases from the experiments. The proof of heredity, as modern genetics require it, we have not been able to furnish. We admit that it would be desirable for all institutions to have a correct "inventory" regarding the question of heredity but we had to be satisfied with something less for the time being on account of numerous difficulties of a practical nature and be content solely with the great probability that our subjects were hereditarily deaf.

Also those deaf persons who showed remnants of hearing of any importance were not included in our series. Whether among our subjects there were also forms of the Bárczi disease, we were unable to ascertain, as the established form of this disease is still rather uncertain. Only when wide research of several psychological functions apart from the intellect has been made will there perhaps be more to say on this subject.

The examination with the Porteus Test has made it clear to us how difficult even a simple performance test can be with the deaf child. The task must be clear, hints and encouragements are understood with difficulty, especially in the case of the younger ones. Above all, the deaf lack the practice which many hearing children of a certain age (eleven and twelve years) have on account of solving such riddles in newspapers and children's magazines. Our examination included 100 hereditary deaf and 100 hearing children of seven to fourteen years of age. We are aware that the group of 100 hereditary deaf-mutes is small, but as we wished to test just those who were almost certainly deaf and dumb through heredity, we were not successful in assembling a greater number. As there were not 100 hereditary deaf-mutes in our institution of these ages, we were able to obtain this number through the kind co-operation of the directors of the "Effatha" Institute at Voorburg, Mr. A. A. van Holten, and the school at St. Michielsgestel, Mgr. A. Hermus.

Further, we took about an equal number of deaf and hearing children of each age to enable us to make a better comparison of the two groups. We also took care that the hearing children came from an environment similar to that of our deaf children. A preliminary trial test made at a training school with an average higher I.Q., showed us very clearly the necessity of a similarity of *milieu*. Also, we tested the hearing children belonging to the ordinary classes and endeavored as much as possible to obtain no special selection of children for testing.

We may perhaps also mention that the Porteus Test consists of a series of maze figures, out of which the subject must each time find the correct way. The various figures continue

to become more difficult; the number of points which, dependent on sundry conditions, one can eventually gain decides the intelligence quotient. The first thing needed for obtaining a high intelligence quotient is that the situation given can be easily reviewed, that a plan can be made and adhered to for some time. Furthermore, one has to be able to control oneself somewhat and not be too easily distracted. Slovenliness and inaptitude soon manifest themselves and quickly cost a few points. Temperament comes to the fore very nicely in this test. A certain measure of secondary function and of power of concentration plays a rôle here. Principally, however, it is insight and survey of a more complicated problem which are the deciding factors for the value of the coefficient. Although, in our opinion, this test lacks a certain versatility and suppleness, we do believe that it may be used for a non-verbal, orientation examination of deaf-mutes in comparison with the hearing.

Notwithstanding the fact that the verbal element plays no rôle, it yet appeared especially in the case of the younger children, also with those who could hear, that the extremely simple instruction "once you have put your pencil on the paper and have, therefore, started, you must continually keep your pencil on the paper" was very troublesome. With a number of younger ones it was even almost impossible to always adhere strictly to the condition that lifting up the pencil more than three times cost half a point. This stipulation, especially for the little ones, had an intimidation effect, and in that way sometimes made insight into their intelligence difficult.

The results for the deaf compared with the hearing group of the same environment appeared to us sufficiently important to mention here, as they may form a contribution to the knowledge of the psyche or the evolution of the psyche of the child born deaf.

Results of the Examination

In Figure 1 we have made the classification of eight various groups of ages, *viz.*, from seven to eight years, etc., to fourteen to fifteen years. On the abscissas we have set out the

ages, on the ordinates the intelligence quotients as they were calculated from the points obtained according to Porteus. In this we see that the deaf children from seven to eleven years inclusive are always below the line of the I.Q. 100, rising only at twelve years to this line, which is established by Porteus as 100 according to the greatest frequency of a very large group.

Our group of hearing children, from like surroundings,

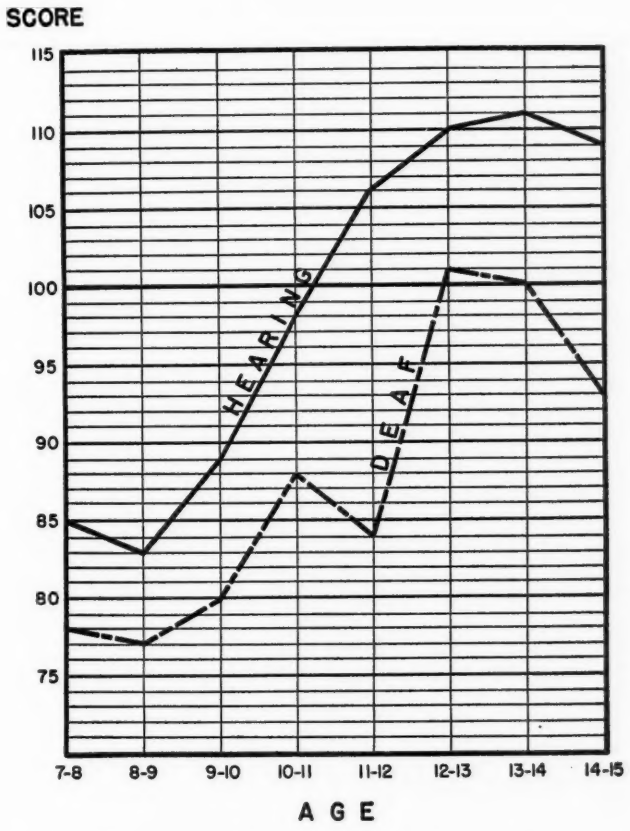

FIG. 1. CLASSIFICATION ACCORDING TO INTELLIGENCE QUOTIENT OF CHILDREN BORN DEAF COMPARED WITH CHILDREN OF NORMAL HEARING

shows an analogous course of the average intelligence quotients. For them, too, the test appeared to be very difficult at an early age, but in this case, however, 100 was reached as an average at the age of ten and the following groups remain above the 100 line.

In Table I we have given the classification of the average I.Q. of two larger groups, from seven to eleven years inclusive and from twelve to fourteen years inclusive, respectively, in order to be able to arrive at a certain conclusion by means of the larger dimensions of the groups.

TABLE I

Group	*Number of Children*	*I.Q.*
Younger Group, Hearing	47	88.64
Younger Group, Deaf	47	78.66
Older Group, Hearing	53	108.11
Older Group, Deaf	53	95.77

We see from this that the deaf child at an early age is far behind, but that this backwardness is later on made up and the I.Q. of 100 almost attained.

TABLE II

Average I.Q. of 100 Hearing Children 99.36
Average I.Q. of 100 Deaf Children 86.09

	Number of Hearing Children		*Average I.Q. Hearing*	*Number of Deaf Children*		*Average I.Q. Deaf*
Total	56	♂	104.09	49	♂	91.24
	44	♀	92.41	51	♀	84.35
1st group	25	♂	90.22	24	♂	85.58
	22	♀	84.50	23	♀	71.43
2nd group	31	♂	113.30	25	♂	96.68
	22	♀	100.03	28	♀	94.96

In Table II we have made a classification according to sex. Here in the case of the hearing and the deaf we see constantly poorer results among the girls, though the differences are sometimes extremely small. It is chiefly apparent that the considerable backwardness of the younger deaf group as compared with the hearing is to a great extent due to the low I.Q. of the girls of this group.

It is always very difficult and, what is more, dangerous to try to conclude too much when one is working with such numbers. As we already had the greatest difficulty in as-

sembling a group of persons really hereditarily deaf without remnants of hearing worth mentioning, we had by force of circumstances to be satisfied with this small number. In order, however, to make possible a comparison as regards intelligence, examined according to Porteus, between two groups of similar environment, we described a second curve, illustrated in Figure 2. Here again the age groups are set

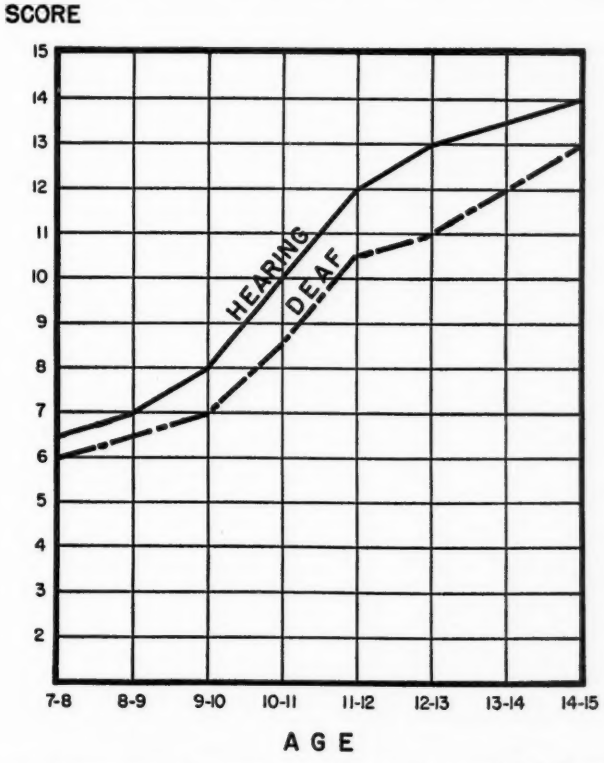

FIG. 2. CLASSIFICATION ACCORDING TO SCORE ON PORTEUS MAZE TEST OF CHILDREN BORN DEAF COMPARED WITH CHILDREN OF NORMAL HEARING

up on the abscissas and on the ordinates not the intelligence coefficients, which are always calculated according to a certain norm, but the number of points obtained. Naturally we must there find an increase from young to old, as no norm

calculation has been premised. In this curve we see that the line of points obtained by the hearing children regularly and without exception rises above that of the deaf. Although the groups are always very small, we do see regularly that the line of every age of the deaf child remains below that of the hearing and does not intersect it or even catch up with it in later age periods.

This curve perhaps betrays more, as now the groups from a corresponding environment, without taking into account established standard figures, can be compared with each other.

Upon examination by this performance test the interesting fact has come to light, just as with Pintner and Paterson, that the deaf child, also without the verbal element playing an important rôle, shows a backwardness of intelligence as compared with the hearing. It would be dangerous to draw conclusions of a far-reaching nature from the results of this one test. We have, however, become more convinced than before of the necessity of applying, apart from this simple performance test, a scale of tests for the deaf, as with Binet-Simon and Pintner-Cunningham Tests. A set of tests comprising a series of performances which examines more widely the complex whole which we call intellect will, moreover, better enable us to arrive at an individual judgment.

For the present, however, it seems to us important to mention that there are signs which indicate that the lack of perceptions of an auditory nature has an influence upon the development of the intellect. Deafness creates a mental backwardness which impedes also the development of regions of the intellect other than those developed by speech.

The spoken word is a symbol for a concept; congenital deafness itself occasions the absence of speech, the symbolic formulation and expression of the object or idea. The lack of practice of this symbolic function at the same time brings about the fact that intellectual powers which we do not get to know through the verbal part of the intellect likewise remain at a lower level or do not attain maturity. As, after all, practice at a later age also refines the intellect and further develops it, the lack of that practice can blunt the in-

tellect. It may safely be assumed that the practice of translating concepts into symbols, as the hearing learn to do by speech, is an exercise for the intelligence "par excellence." But as we live in a society of hearing persons, we are no longer so much aware that this is indeed the case. Whether the assumed impediment of intellectual functions in the case of hereditary deaf-mutism without remnants of hearing is a constant phenomenon, which arises from the existence of a sensorial defect, will still have to be confirmed by further experiment. As to how far a number of other functions which are not immediately regarded as intelligence signs are likewise psychically impeded as a result of deafness, or just some functions (we are thinking now of imagination, memory, eidetiek—*i.e.* memory pictures, visual compensation), are furthered by this lack of hearing, is a question which we have to solve in course of time.

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The Deaf and Their Vocational Problems[1]

By JOHN P. ORR, B.S.
Principal in the Western Pennsylvania School
Edgewood, Pittsburgh, Pennsylvania

THE DEAF have their vocational problems today as well as do the hearing public. The vocational problems of the deaf are multiplied many times due to the fact that the deaf are lacking one of the essential senses which closes many avenues of employment to them. A few of the problems which it is felt we as teachers need to be aware of will be mentioned here to emphasize the necessity of doing something to prevent our deaf pupils from falling into the usual rut. These problems, in the main, comprise the following:

I. Lack of sense of responsibility.
   1. Time.
   2. Speed.
   3. Being faithful to obligation.

II. Demanding the wages of a journeyman when they are only apprentices.

III. Lack of occupational knowledge.
   1. Building air castles which they can never attain due to perhaps lack of mental ability, aptitude and financial aid.

IV. Seeking employment inadequately prepared to compete with hearing girls and boys.

V. Gaining entrance into the trade and craft unions.

WHAT CAN WE AS TEACHERS DO ABOUT THESE PROBLEMS?

1. Use our influence in keeping the deaf in school long enough to give them a vocational course comparable with our present day public vocational high school course.

2. Have a Guidance Program which includes occupational teaching. Every pupil should take up not later than the seventh grade the study of selecting the career for which he is adapted. We must remember that his first step should be to acquire a definite knowledge of his own talents and ap-

[1] A paper read before the Pennsylvania Conference for Exceptional Children, Harrisburg, Pennsylvania, October 8, 1938.

titudes, and the next to find the occupation in which he can apply them. This is the province of prevocational training.

A. *Occupational Teaching in Prevocational Classes*

Prevocational education, as defined by the U. S. Office of Education (Bulletin No. 21, p. 70, 1916), is as follows: "Prevocational education includes any form of education designed to enable a youth to discover for which one of several possible vocations he is best fitted by natural ability and disposition. The program of instruction and practice for this purpose being based mainly upon actual participation on the part of the learner in a variety of typical experiences derived from the occupations involved." Elaborating further along this line, Edwin A. Lee in his book "Objectives and Problems of Vocational Education" says, "The development of the various phases of trade and industrial education has revealed that an adequate program can not be realized unless the scope of trade and industrial education is widened to include prevocational education. The policy of the Federal Act specifically states that 'vocational education may be given to boys and girls who, having selected a vocation, desire preparation for entering it as trained wage earners.' Vocational education is not possible for people who have not selected a vocation. It is not feasible or wise to use vocational classes for discovering vocational ability or for determining vocational choice. This is distinctly the function of prevocational education; consequently there is an obligation laid upon every school that undertakes any vocational education to devise ways and means for selecting and determining the occupational interests and fitness of all pupils before undertaking to give specific vocational training to them. For the adolescent this part of training is generally found in the junior high school."

B. *Vocational Guidance Through Prevocational Training*

"This scheme is based upon the theory that it is possible to guide an individual by giving him actual participating experience in a number of occupations. Through this participating experience (the try-out method) he can measure his

interests and aptitudes against the actual requirements and working conditions of such occupations. In this way he can, without doubt, get some idea of what is required in industrial employment taken as a whole. What is more important still, he can learn whether his interest is toward this field or that field of economic activity."—from "Vocational Education in a Democracy" by Prosser and Allan.

C. *Twofold Purpose of Prevocational Training*

1. Modification of work commonly found in the fifth, sixth and seventh grades in order to motivate that work for those pupils who have been seriously retarded and are hopelessly behind grade because they need the stimulation which comes from concrete doing. Because this type of pupil is predisposed to leave school at an early age, the try-out method of training gives him a general idea of industrial activities of which he may become a part.
2. Exploratory or try-out activities for all pupils in order to predetermine the aptitudes, interests and abilities of each pupil to some degree and in order to shorten the period of economic adjustment.

D. *Difficulties Encountered in the Try-out Method*

There are various difficulties which arise in the try-out method of teaching which are more or less common to other methods of teaching occupational activities. These may be listed as follows:

1. Inadequacy of sampling.
    a. Due to the great number of occupations, of which there are 3,000 or more in the industrial field alone, according to Census reports.
    b. Due to the time element.
2. The changing job.
    An individual does not progress in the same line of work at all stages of his career.
3. The changing youth.
    A serious question is the degree to which the reactions or interests of an adolescent in any way indi-

cate or predict what he will be when he becomes an adult.

Relation of Training to Biological Progression.

1. *Stages in Biological Progression*	2. *Character*	3. *Training Program Needed*
Childhood	Imitation	Fundamental Social Arts
Adolescence	Instability	General Education Prevocational Training Vocational Training
Maturity	Increasing stability	Training for pursuit of an occupation as an efficient economic unit.

Since we cannot do away with the multiplicity of our occupations, nor change the biological characteristics of adolescence, nor avoid the necessity for directing attention toward the choice of a vocation, we must accept these difficulties as permanent. In meeting this very real situation, prevocational training can help our pupils to choose between broad fields of employment or groups of lines of employment if the practical arts are used as devices in discovering the interests and aptitudes in the industrial field and in the household arts.

E. *Information a Pupil Should Receive in the Study of an Occupation*

I. Description of the Occupation.
   1. What is the nature of the work done in the occupation?
      a. Is it in the field of production?
      b. Is it an occupation rendering service?
      c. Is it in the field of communication?
      d. Has it to do with transportation?
      e. Is it in the field of distribution?

II. Need for Workers in the Occupation.
   1. Is it a growing occupation?

2. Is the demand for workers growing?
3. Has it reached a peak in demand for workers?
4. Is the demand for workers on the decrease?
5. Is it likely to become obsolete?

III. Duties.
1. List the duties performed in the occupation.
2. Are the duties performed individually (as at a machine)?
3. Do the duties involve work with others?
4. Do the duties necessitate dealing with a public?

IV. Qualifications.
1. Sex.
   a. Does the occupation employ men only?
   b. Is it predominantly a woman's occupation?
   c. What is the proportion of men and women employed?
2. Race.
   a. Are there any restrictions due to race?
   b. Is it an occupation without race restrictions for employment?
3. Other Qualifications.
   a. Is it an occupation requiring employees who are not afraid of dirt and grease?
   b. What are the requirements in the way of personal appearance and dress?
   c. What are the requirements in the way of intelligence?
   d. Are any special personality traits required?
   e. What special skills e required?

V. Education.
1. What are the necessary educational requirements?
2. What are the training requirements in service?
   a. Is it just a matter of going to work and learning as you work?
   b. Are you required to enter apprenticeship training?
   c. Are short intensive training courses given on the job?

VI. Line of Promotion.
   1. Is there a definitely organized line of promotion?
   2. Is there more than one line of promotion?
   3. What are the chances of promotion for those who qualify?
   4. Does quality of work have any bearing on promotion?

VII. Length of Time Before Skilled.
   1. Is it a matter of only weeks or a few months before the necessary skill is acquired?
   2. Does it require a definite period of training?

VIII. Related Occupations to Which This May Lead.
   1. What are the related occupations in the same general field of employment?
   2. What are the related occupations in entirely different fields of employment?

IX. Wages.
   1. What is the minimum starting wage?
   2. What is the maximum wage paid at the end of the training period?
   3. How long does it take to reach that maximum?
   4. Are there any further increases based on length of service?
   5. Are wages based on the hourly rate?
   6. Are they based on the piece rate?
   7. Is the pay based on a monthly salary?
   8. Does the occupation pay an overtime wage?

X. Hours.
   1. What is the length of the working day?
   2. Do the hours involve a straight day shift?
   3. Do they necessitate working at night?
   4. Are the shifts alternated?
   5. Are the working hours scheduled daily?
   6. Do the working hours involve overtime?
   7. Vacations.
      a. Is there a regularly scheduled vacation?
      b. Are vacations to be had only for the asking?
      c. Are the vacations with or without pay?

XI. Regularity of Employment.
   1. Is there steady employment in the occupation?
   2. Is it a seasonable occupation?
   3. Do peaks and depressions in business greatly affect the occupation?

XII. Health and Accident Hazards.
   1. Is the occupation injurious to health due to close confinement indoors?
   2. Does the occupation involve work outdoors?
   3. Is the work around dangerous machinery?
   4. Is the work in intense heat?
   5. Is the work in cold storage?
   6. Does the work necessitate the breathing of wood dust, coal dust, or silica dust?

XIII. Organizations.
   1. Employer's organizations.
   2. Employee's organizations.
      a. Dues.
      b. Remunerative benefits when unemployed.
      c. Requirements for membership.
      d. Contacts for becoming a member.

XIV. Special Employment Agencies.
   1. Is employment obtained through company employment departments?
   2. Local and state employment agencies.
   3. Private employment agencies.
   4. Local union branches.

XV. Type of Place of Employment.
   1. Does the occupation necessitate working inside or out of doors?
   2. Does it necessitate working under the ground, on the ground, or up in the air?
   3. Places relatively free from danger and places that are hazardous?
   4. Wet places or dry places?
   5. Places of below normal temperatures, places with normal temperatures, and places with temperatures above normal.
   6. Dusty places and places free from dust.

Early Decision Important

If possible, the pupil should settle upon his life calling at the age of sixteen or seventeen. If he leaves school at or before that age, he must make some selection; and if he continues school, he should have a goal toward which to strive. The pupil who leaves school early should seek the opportunity to learn rather than to earn. The desire to get into a position that pays good wages, even though it offers no opportunity of advancement, has ruined many a youth.

Lives Ruined by Wrong Choice of Careers

Many young deaf people in this country are employed on jobs for which they are unfitted and in which they can never attain success. Others are spending the most precious years of their lives in idleness, either because they have not found out for what occupations they are adapted, or because they have not taken up the training necessary to enable them to enter those occupations. These young people might have been saved this misfortune if they had had vocational guidance at school so as to be able to find their own aptitudes and thereafter to choose the occupations for which they were individually adapted. Many lives are ruined by the choice of careers based mainly upon the wages paid at the outset. Vocational guidance enables the individual to find the field in which he can use his talent, his education, and his training to the best advantage for his own benefit and that of society.

Labor Legislation Affecting the Deaf

By Alfred E. Stephens, B.A.
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In recent years, we have noticed a growing interest in labor legislation affecting the deaf and the hard-of-hearing portion of our population. Several states have undertaken to pass laws concerning the welfare of the deaf and the hard-of-hearing people within their boundaries, especially in reference to employment opportunities or to vocational training. The laws of these states vary in scope, and in administration, but all aim at the common betterment of persons more or less affected by a loss of hearing. The purpose of this article is to attempt to point out the differences in the various laws, and to describe the fields covered by these laws.

Kinds

Most of the labor legislation concerning the deaf and the deafened provides for the creation of a special division within the state department of labor. In Minnesota, the law states that "There shall be created in the bureau of labor a division devoted to the deaf." North Carolina has a similar law establishing a "Bureau of Labor for the Deaf" within the Department of Labor of that State. The State of Michigan has provided that "There shall be created in the department of labor and industry a division to be devoted to the interests of the deaf and deafened." In Pennsylvania the situation is somewhat different. In that commonwealth the General Assembly passed an act "making an appropriation to the Department of Labor and Industry for the rehabilitation of the deaf and hard of hearing and for the purpose of matching additional Federal funds." Here, the Division for the Deaf is dependent upon the Bureau of Rehabilitation for its basic function. The Bureau of Rehabilitation is presumably a part of the Department of Labor and Industry.

Several states, like Oklahoma for example, have no direct legislation providing for the establishment of a division or

bureau for the deaf, but take care of their deaf and deafened population through their departments of rehabilitation. The deaf and deafened are considered among the handicapped, and are given the same treatment as are the crippled, the paralytic, and the shell-shocked.

Functions of the Bureaus

The purposes of the bureaus devoted to the interests of the deaf and deafened among the states which have such bureaus are not very uniform. Thus, in one state, the primary purpose is to protect the deaf and deafened; in another, rehabilitation, as training and placement, comes foremost; in a third state, the contacting of deaf children about to be graduated from school is an important function.

In Michigan the scope of the bureau is rather broad. The director of the Division of the Deaf and Deafened is required to collect and tabulate statistics pertaining to the deaf and deafened, as to their employment and welfare; to ascertain what trades or occupations are most suitable for them; and to seek new, but adaptable, fields of employment. He may investigate, and seek to combat, charges of discrimination against them by employers, industries, corporations or organizations. His office is also required to make a survey or census concerning the deaf and deafened, and to determine their standing as insurance risks.

The requirements of the bureau in North Carolina are similar to those in Michigan. The chief of the bureau is required to study "the methods in use in the education of the deaf as exemplified in the deaf themselves, with a view to determining their practicability and respective values in lifting them to become self-supporting, useful citizens, and enabling them to obtain the greatest amount of happiness in life."[1] Other duties of this bureau, as in the case of Michigan, are to compile data and statistics relating to the condition of labor and employment of the deaf in its own and in other states. According to Mr. J. M. Vestal, chief of the North Carolina Bureau of Labor for the Deaf, the bureau has had such problems as "assisting the deaf on legal mat-

[1] Labor Laws of North Carolina, 7312 (k).

ters not clear to them, contacting parents of deaf children and arranging for having them entered in school, assisting in securing financial aid for vocational rehabilitation during training periods for those who lack sufficient training, and who would become independent bread winners instead of street loafers, etc."

The Minnesota law requires the chief of the Bureau of Labor for the Deaf to be something of an expert in vocational guidance in that he "shall ascertain what trades or occupations are most suitable for them and best adapted to promote their interest, and shall use his best efforts to aid them in securing such employment as they may be fitted to engage in." In order to carry out this provision effectively, both the state Rehabilitation Office and the educational system of the state are relied upon. There is also a co-operating agreement with the employment service throughout the state.

For the rehabilitation set-up in Minnesota, all cases of deaf persons who are reported to the Rehabilitation Office are sent down to the Bureau of Labor for the Deaf for attention. The bureau attempts to discover if a training program in some trade is needed and if so, plans the training, subject to the approval of the Rehabilitation Office. The Bureau then supervises the training course, and at the end of the course, makes the placement of employment.

As to the educational system of the state, the chief of the bureau attends conferences of day-schools having deaf children about to be graduated. Every deaf child's educational background is carefully gone over, and plans for further education, for training, or for employment placement are made. Every spring, the chief visits the state school for the deaf and interviews the members of the graduating class. The contact between the bureau and the schools is so close that the name of practically every deaf child in school, and some not yet old enough to attend school, is on file at the bureau. By keeping such records on file, the bureau hopes to be very helpful in placing them when they are old enough for employment.

The Division for the Deaf in Pennsylvania came into

being when the legislature of that state made an appropriation of two years to the Bureau of Rehabilitation for the purpose of providing for the rehabilitation of those who are deaf and hard of hearing in order to secure for such persons placement in industry. The division, or rather, minor agency, lacks the broad scope and the independent authority to carry out the work given to the bureaus of labor for the deaf in other states, such as those above named. The laws regulating the Bureau of Rehabilitation are primary and above those of the agency, and the work as a whole is performed in the same manner as that of rehabilitation—training, placement, etc. Since the money appropriated covers the two fiscal years beginning June 1937, the fate of the agency after 1939 is anybody's guess.

Administration

In those states having labor bureaus for the deaf, the law gives the Commissioner of Labor[2] the right to appoint the head of such bureaus or divisions. In North Carolina, the Commissioner must appoint a competent deaf man to take charge of the division; in Michigan, a competent person is appointed; in Minnesota, a competent man. The title of each head appointed is not always the same. In Minnesota he is designated as the Chief of the Bureau of Labor for the Deaf. The North Carolina head bears the same title, while the Michigan chief-in-charge holds the title of Director of the Division of the Deaf and Deafened. All are subjected to the rules and regulations or to the supervision of the State Departments of Labor. The Michigan statute[3] mentions that "there shall be a deputy director who shall serve in the capacity of 'general field agent' in order to properly contact industrial executives, factory proprietors, and employers of labor in general." Further, the statute states that "The director shall, with the approval of the commissioner of labor, appoint the necessary assistants to properly conduct the offices of his division, whose salaries

[2] In Minnesota, the words "Industrial Commission of Minnesota" have been substituted for "Labor Commissioner" or "Commissioner."
[3] See pages 181-182 of this number of the Annals.

shall be determined and fixed by the department of labor and industry." In the Minnesota and North Carolina laws there is no explicit mention of assistants. However, it is known that clerical help has been appointed in Minnesota, at least. In North Carolina, the chief of the bureau is required to perform other duties in the Department of Labor whenever his own duties should not occupy all of his time. In Pennsylvania, the law makes no provision for the appointment of a chief, but leaves the responsibility of employing persons in its rehabilitation work with the Department of Labor and Industry.

Results

From the evidence at hand, there is no doubt that the work of the labor bureaus for the deaf here discussed has been of inestimable economic value. In North Carolina, the existence of the bureau has resulted in 95 per cent of the deaf citizens of that state being employed in a great variety of lines of work. This record compares with 45 to 55 per cent in other states (presumably those without bureaus). Many deaf people in Minnesota and in Michigan have also been given the help that they would not have otherwise received in seeking employment or in securing the necessary training. In Pennsylvania where the scope is limited to rehabilitation work, the agency concerning the deaf and hard of hearing has, since its establishment, been an outstanding success.

Undoubtedly much could be done by labor bureaus for the deaf, especially in those states that do not now have them.

Rhythm and Its Relation to the Training of the Deaf

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INTRODUCTION

THE word "rhythm" comes from the Greek word "Rhythmos," which means to flow. Developed into the modern sense it is understood to mean movement or beat in verse or music.

The whole universe moves to rhythm. All nature seems regulated by rhythm; even our heart beats and breathing are measured rhythmically.

The instructor in rhythm with the deaf child strives to give him a chance to express what is within him. She is also trying to develop physical co-ordination, keeping in mind that there are three fundamental parts, the spoken word, tune in music and song, and bodily movement.

Training in rhythm consists in developing rhythmic sense in children by correlating voice training, dancing and language. In the advanced grades the training should be a varied application of these, such as dramatics.

Rhythmic training in schools for the deaf was begun as far back as 1877 when Mr. Enoch H. Currier, principal of the New York School, discovered that the use of the drum improved greatly his military training.

In 1912 Dr. Ignatius Bjorlee gave his first demonstration in unison speech around the piano.

From this time on group training in rhythm made great headway, particularly when it was learned that the piano could be used as an effective means in developing tone quality and accent in speech. In some schools the drum is used as basic training.

Since 1923 the Tennessee School has had rhythmic training in the oral department and its value has been far reaching.

Aside from the fact that the children love their twenty

minutes each day devoted to rhythm, it has been invaluable in helping them to become happy normal children who have begun to realize that there is a joy in living for those who want to see and feel beauty.

Objectives

There are three phases of the rhythm program as seen from the angle of the deaf child. These are

I. Action as influenced by rhythm
II. Speech as guided by rhythm
III. Mental attitude as the result of rhythm

Elaborated further, these major aspects develop as follows:

I. Objectives of rhythmic action
   A. To stimulate co-ordination between mind and muscle
      (1) By developing balance so lacking with the deaf
      (2) By creating poise
      (3) By influencing a light, springing step or natural walk, instead of a stumbling, shuffling gait.

II. Objectives of rhythmic speech
   A. To aid natural speech
      (1) By encouraging accent
      (2) By giving conscious control of voice
      (3) By influencing correct emphasis

III. Objectives of rhythm in creating desirable mental attitudes
   A. To make of the deaf child a more normal child
      (1) By providing for child activity on a constructive basis
      (2) By helping the child to interpret one phase of the joy of living
      (3) By dispelling that feeling of inferiority
      (4) By arousing what is naturally dormant—the inner rhythmic feeling
      (5) By helping the child to interpret varied imitations of life

DEVELOPMENT OF RHYTHMIC ACTION

I. Informal interpretation of natural rhythms, such as
   (1) Swaying of trees in the wind—three-four time
   (2) Ticking of a clock—two-four time
   (3) Rocking of a baby—two-four time or three-four time
   (4) Imitation of an airplane motor—six-eight time
   (5) Comparative walks of
      (a) Elephant
      (b) Bear, or
      (c) Flight of a bird

II. To develop through vibration a perception and sense of time
   (1) Two-four time
   (2) Three-four time
   (3) Four-four time
   (4) Six-eight time

III. Interpretation of times
   (1) A waltz—butterfly
   (2) March—dwarfs
   (3) Four-four time—grasshoppers
   (4) Six-eight time—alternate exercises as a frog hopping to the count of six, then resting for six beats
      (a) These exercises are done with hands or feet and sometimes with a combination of both.

IV. Band exercises
   (1) Large groups using a variety of instruments and led by the instructor
   (2) Small groups using charts

V. Dance steps
   (1) Marching—two-four time
   (2) Waltzing—three-four time
   (3) Heel-toe—four-four time
   (4) Run-hop—six-eight time

VI. Dances
   (1) Original applications of these foundation steps

(2) Folk dances
(3) Tap dancing
(4) Imitative dances which are particularly good for deaf children as:
  (a) June Bug Dance
  (b) Cotton Pickers in the "Big Apple"
  (c) Nine Little Goblins
  (d) Mother Goose Characters
  (e) Snow Flake Dance
  (f) Animated Dolls—Toy Shop
  (g) Flowers in an "Old Fashioned Garden"

Developing Rhythm in Speech

I. Developing a perception and understanding of sound
II. Developing a perception and understanding of vibrations
  (1) Resonance
  (2) Volume
  (3) Pitch
  (4) Time
III. Application of this knowledge to voice building
  (1) Volume—strong and weak chords
  (2) Resonance—chords compared with staccato notes
  (3) Pitch—high and low chords
IV. Application of this to child's vocabulary as:
  (1) Two-syllable words
  (2) Three-syllable words
  (3) Four-syllable words
  (4) Five- and six-syllable words
  (5) Accent of important words in sentences
V. Songs and rhymes

Developing Mental Attitude Through Rhythm

This is the natural outgrowth of the first two forms of development. In a gradual and easy way these children begin to walk more naturally and begin to understand that the life in which they live moves in rhythm. Something new is awakened in them. They start by imitation, but before long they are unconsciously feeling rhythm in everything they do. It is very gratifying to see them develop into natu-

ral children with a grace and poise that make it hard to convince our visitors that these children are in many cases totally deaf.

Rhythm programs do much for the deaf child. They encourage finished performance, help him to appear in public and convince him that he can be just as attractive and dance just as well as—or better than—hearing children and that his speech can be developed as a living integral phase of his education. He enjoys these programs and needs the poise and assurance that performances before an audience can instill in him.

A dance, particularly for deaf children, is better when it is interpretative. These children are good in imitation and pantomime. If a climax is involved in a dance, they respond much better.

A teacher of rhythm must not only understand music but must be able to interpret rhythm and to do creative work to the extent that she may be able to instill it in others.

The choice of music is important. It either makes or mars a program. It is better to have a short quick program, perfectly timed and accompanied by appropriate music than a longer one on a less efficient scale.

Suggestive Outline for Exercises in Rhythm

In the beginning drills it is better to have a grand piano. In this way even a large class will be able to group around the instrument in such a way that all may be able to have equal vibrations through their finger tips. Sometimes they can detect vibrations better by putting their cheeks or foreheads lightly on the piano while the music is being played.

The type of music used at first should be very simple and of a rhythm easily detected.

The time allotted to rhythm periods should be about twenty minutes for each day. As nearly as possible this time should be broken, half for rhythmic action and half for speech drills. This may also be arranged by alternating days, one for dances, the next for songs.

Band periods should be the same in length and held at least twice a week.

Correlation between the rhythmic drills and the formal speech drills in the different classes should be foremost.

Speech at the piano should always be an application of the speech learned in class. Corrections for speech should occur later in the regular class as rhythm is a time for complete relaxation and as nearly as can be derived, an unconscious step to natural speech.

Suggestive Steps in Rhythmic Action

I. Rhythmic motion
  A. Informal drill
    1. Interpretation
      (a) Slow
      (b) Fast—running
      (c) Sad—walking with head down
      (d) Joyous—quick steps—arms waving
      (e) Uneven time—frogs
      (f) Broken time—grasshopper
      (g) Motor or power—represented in rhythm
      (h) Rhythm of different moods—laughter—anger, etc.
  B. Pitch
    1. Low range—drum
    2. Middle range—horn
    3. High range—whistle
      (a) If these ranges are played on the piano, the children often play this range themselves and seem to understand the difference much better.
  C. Volume
    1. Low and soft chords
    2. Accent and unaccented chords
    3. Beginning times

The blackboard may be used in this connection with a long line for accented beat and short line for unaccented beat.

All exercises should be given at first with the eyes open, followed by the same drill with eyes closed. They will develop their sense of vibration to the point where they may

be able to detect the different times from the wall or from the floor.

In beginning the detection of different times they may either tap on the piano, clap, move their hands, or later count.

D. Steps taught to interpret different times
   1. Two-four time
      (a) Marching
      (b) Step—point step
      (c) Skipping
      (d) Hopping
   2. Three-four time
      (a) Waltz
      (b) Waltz-kick—good for balance
   3. Four-four time
      (a) Heel-toe
      (b) Step point three times with toes
   4. Six-eight time
      (a) Run six steps—hold six counts or jump and run to the same count

E. Dances
   1. Interpretative sketches
   2. Folk dances
   3. Tap dancing
   4. Social dancing or ballroom dancing

F. Band exercises
   1. Large groups, teacher leading
   2. Small groups, child leading with charts

G. Combination of rhythmic motion or dancing with speech into some form of dramatic actions

SUGGESTIVE STEPS IN RHYTHMIC SPEECH

II. Rhythmic Speech
   A. Pitch—using high and low range of keyboard
      1. —ar—low range
      2. —oe—middle range
      3. —o'o—high range
      4. ar—oe—oo—for combination
      5. ee—very high range

B. Volume and resonance
   1. —m—for nasal resonance
   2. —o'o—for vowel resonance
   3. —Boom—for volume

C. Voice interpretation of times
   1. —Ding—"dawng"ing for three-four time (using bell)
   2. —Bow—wow—wow—three-four time
   3. —Mo's—mo'o—mo'o mo'o—four-four time
   4. Puff (six)—six-eight time (motors)

D. Word building
   1. Ma—ma; Da—da; mother; father—three-four time; Many; two-four over; Apple
   2. Animal three-four (far—far far)
   3. January—four-four time; Watermelon

E. Sentences
   1. I love you—(far—far—far)
   2. Good morning—(far—far—far)
   3. How do you do—(far—far—far)

F. Songs
   1. First play the music over several times until the children begin to feel the rhythm, then write the words they have already had in speech drills in class on the blackboard, marking the accented syllables. Try it first using "far." When this is clear and correct, then try the words. Then put to music. Keep in mind always a correlation between rhythmic speech drills and the subjects taught in class. Around the holiday season appropriate songs and dances may be selected. Songs to aid in history and other subjects are easily found.

The following is more detailed suggestion as an exercise to follow in teaching rhythm:

I. Rhythmic Action
   (1) Listen to the music (hands on piano, eyes open)
   (2) What time is it or how many?
   (3) Count to time
   (4) Clap to time

(5) March or show the time with your feet
  (a) This calls for a variety of steps.
(6) Show me a new step for this time—calls for originality but often is very satisfactory.
(7) This exercise may be varied by asking children to represent in rhythm the following interpretations:
  (a) A cow, clock, motor, frog, duck

II. Rhythmic Speech
(1) Listen to the music
  (a) high or low
  (b) loud or soft
(2) How many accented: (Imitate with "far")
(3) How many unaccented?
  (a) |; |||; ||||; ||||||; (different times)

The following are further suggestive exercises for voice building or rhythmic speech:

(1) Pitch
  (a) High—low—(ar—oo)
  (b) Motion of trees swaying using arms. When arms are down say "ar," when up say "oo"
(2) Continuity
  (a) Imitate engine
  (b) Play train. Arms drawn back and forth to represent drivers, saying "Puff—puff"
  (c) Imitate beating of a drum, using "Boom"
(3) For staccato and unaccented notes
  (a) Imitate clock, using "Tick," to different times
(4) For open throat and relaxed jaw
  (a) Imitate sheep, using "Baa"
(5) For firm lips
  (a) Imitate cow, using "moo"
(6) To improve m—n—ng (nasal sounds)
  (a) Imitate high bell, using "een"
  (b) Low bell using "dawng"—
  (c) Then begin "ding—dawng"

Suggestions for Kindergarten Bands

I. Large Groups—two or three classes
(1) Instruments

(a) Rhythm sticks (for beginners)
(b) More advanced instruments, as:

cymbals	Chinese wood blocks
triangles	sandpaper blocks
drum	bells
tambourines	rattlers
xylophane	nails and horseshoes

(2) Music
(a) Use simple rhythms at first—all instruments playing alike.
(b) Next divide up the music so that each instrument plays only during certain measures.

II. Small Groups—one class is preferable
(1) Use only instruments as shown on chart.
(2) Use charts patented, copyrighted and published by Mary E. Mayberry and Edith A. Hill.
(3) Music as shown on chart

It is probably best to start with a large group as it is hard for very young children to read the chart method. Try to give each child his choice of instrument as far as his ability will permit and change from time to time. The selection of music is important. Some of the numbers that have been used in our school are:

"Jingle Bells"
"Anvil Chorus"—using a real anvil
"Indian Dances"—featuring tom-toms
"I'm Forever Blowing Bubbles"—featuring bubble pipes

The small group seems best for children who have had at least two years training. Each feels more responsibility. This constitutes a very satisfactory drill in co-operation and attention, and the children love to read the charts. They feel a certain pride in this crude form of reading music. On these charts are shown the pictures of the instruments to be played in the correct position in each measure.

It is best not to start any form of band practice until the second year in school when rhythm comes a little easier for each child. This year our small group took "Semper Fidelis" by Sousa. Occasionally some child was selected to

lead. The leader would point to the chart, keeping time to the music.

SUGGESTIVE PLANS FOR RHYTHMIC DRILLS ACCORDING TO GRADES

I. First Preparatory
   (a) First term—Informal drill on the basis of music or rhythm appreciation
   (b) Second term—Beginning voice work as outlined in the rhythmic drill outline

II. Second year
   (a) Voice work—tune—pitch—accent
   (b) Band practice—large group
   (c) Interpretative steps in rhythm

III. Third year
   (a) Collective dancing
   (b) Folk dancing
   (c) Interpretative dancing as "Wedding of the Painted Dolls"
   (d) Band practice—using charts
   (e) Phrasing and accent

IV. Fourth Year
   (a) Phrasing and accent
   (b) Dancing

V. Fifth Year
   (a) Songs
   (b) Beginning tap dancing

VI. Sixth Year
   (a) Tap dancing
   (b) Beginning the combination of dancing and songs

VII. Seventh Year
   (a) Tap dancing
   (b) Beginning social dancing
   (c) Songs

VIII. Eighth Year
   (a) From this grade on up, the drills should be based on what the class needs most. A variety of dances may be taught and every effort made to start different forms of dramatization.

IX. It is hoped the advanced classes may be able to combine rhythmic motion and speech into one-act plays or other forms of dramatization.

Evaluation

Rhythm not only develops an instinct for time, symmetry and balance but also the sensibilities through the nervous system. In this respect a child's temperament is a great asset. Often this musical temperament may be developed by rhythm. It is quite natural that this temperament is ordinarily lacking in deaf children.

It is interesting to watch the difference in walk and general attitude among those who have taken rhythm as compared with those who have not.

That rhythm is invaluable in regard to speech development is unquestionable. The chorus work in our school is a good example of the difference between the usual monotones of those who speak but do not hear as compared with those who have learned to accent, to emphasize and to use differences in pitch. It sounds more like chanting but even if the tune of the song is missing it is hard to realize they are deaf. They seem to feel what they cannot hear.

In one instance, when visitors were being conducted over the school grounds, their attention was drawn to little Mattie Bohanan who was somewhat unconsciously and carelessly practising a dance step on the sidewalk in front of the dormitory. While she repeated over and over her step, she was chanting the words to an accompanying song. It was not easy to convince our visitors that this child could not hear.

Deaf children naturally miss a great deal of the joy of childhood. This year one of the rhythm classes gave as a program the "Big Apple." They represented little Negroes in the cotton fields. They enjoyed this immensely, and these children were often seen trucking, instead of walking, susie-queing and doing other steps in different combinations. This dance, more than most of their rhythmic dances, made them seem more like natural children. They realized they were dancing a dance that other children were doing. It seemed to dispel any feeling of inferiority.

Any collective dance is good for organized play, co-operation and responsibility. Memory for the different steps seems to offer no special difficulty. The children are unusually dependable for this, perhaps because they want to remember the different steps in the correct order. It is also very good in developing leadership. A good method is to change leaders for different periods.

Rhythm often helps a child over a rough spot, as in the case of Mabel Gregory. She had a poor record in class work. Nothing seemed to inspire her or reach her. Later it was discovered that she was good in rhythm work. A great deal of stress was placed on this because it was the one subject in which she could be depended on. She was asked to lead in her rhythm class and she took a great deal of pride in this. This pride carried over and helped her remarkably in her class work. She had been discouraged and needed just such a boost as this gave her. When commencement came, she was selected to give the most difficult dance in a garden scene. She represented a butterfly. She was very thin and the nurse was consulted. It was decided to give her a tonic and extra milk. By the time she gave her dance at commencement, she had gained not only in health and appearance but she was vibrant and happy. Needless to say, this attitude carried over into her regular school work.

Rhythm has been, and still is, in an experimental stage as applied to training the deaf, but its value is now not challenged since it has been tried in our school long enough to prove its worth.

The result is happy children naturally rhythmic in action and voice, with better poise and posture. The suggestion of a great gap between the world of deaf children and that of those with normal learning is thus far less apparent.

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Music for Deaf Children

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CHILDREN classed as totally deaf do not possess even the rudiments of music. They have had no experience with speech rhythms, thus they lack even that natural relationship of music and language which every normal child entering an elementary school has unconsciously absorbed. They may never have heard musical sounds, and are unequipped mentally to orientate pitches, timbre and other qualities of sound.

Faced with these facts, Mr. Frederick Lewis, supervisor of the Federal Music Project at Lansing, Michigan, recently initiated experiments in co-operation with the Lansing public schools, to determine whether the completely deaf child could be brought to an appreciation of music, and, through appreciation, to a self expression in music somewhat approximating that of the normal child.

These experiments were carried out in a special classroom set aside for the teaching of twelve children classified as totally deaf.[1] While it was not the purpose of the experiments to develop hearing as such in those children, the room was equipped with hearing-aid devices for the experiments.

A simple microphone was augmented with an amplifying mechanism, and wires from this amplifier led into connecting "blocks" running across the tops of two tables large enough to accommodate three children on each side. Individual sets of headphones were in turn jacked into the connecting blocks fed by the amplifier.

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[1] On inquiry by the ANNALS as to the method by which it was determined that the twelve children were "totally deaf," Mr. Wecker reports the following:

"The twelve children mentioned in the article as being 'totally deaf' were so classified in the room assigned to such children by the school authorities of Lansing, Michigan, where the experiments took place. My understanding of the designation 'totally deaf' as explained by the school authorities was that it was impossible for these children to hear any sounds whatever, regardless of volume or intensity, without the aid of bone conduction or other similar device."

While the experiments were with those classified as totally deaf, it was recognized that even under such a classification there would be a varying degree of sensitivity on the part of each child. For that reason, each child was provided with a volume control for regulating the strength of the signals coming through his headphone. The headphones were used in order that the children might have their hands free to demonstrate their individual reactions to the music.

With this equipment set up, the first approach to the experiments was an attempt to acquaint the children with simple rhythm. This represented the easiest musical fundamental toward which their attention could be directed, since rhythm can be experienced by the deaf as a series of regularly recurring vibrations or pulsations that can be felt, even if they are not "heard" as the normal person hears them.

A composition of march rhythm was consequently played by an orchestra, great stress being placed upon all accented beats. As these sounds poured through the headphones, and, for the first time, entered the consciousness of these children, their little faces lighted up with surprise and pleasure.

After each child had adjusted the volume control to suit his particular needs, the next step in the progressive development of the experiments was an attempt to get the children to give individualized reactions to the music of the orchestra. A baton was given each little listener, and he was shown how to beat time to the rhythmic pulsations coming to him through the headphones. To prevent the process from becoming visual, the orchestra was hidden from sight by a screen. Soon all twelve children were beating in exact time with the music.

The possibility that the process might be imitative on the part of some of the children was checked further by having each child beat time alone.

From simple rhythm it was comparatively easy to progress to a correct response to duple and triple rhythm. Once this was mastered, the experimenters further checked and tested the reactions of the children by changing the rhythm to a faster or slower tempo without warning. Next, unex-

pected variations from duple to triple to simple rhythm were given. The children responded correctly with their batons to these rapid changes.

These first experiments had proved to the satisfaction of Mr. Lewis that rhythm can easily and effectively be taught to children in all stages of deafness. The next purpose of the experiments was to explore the possibility of individual response and expression to rhythmic stimuli.

The obvious fact that had to be recognized before beginning with these individual experiments was that the same gross individual differences in sensitivity to music and in musical potentialities would exist latently in deaf children as they do actively in those of normal hearing. As among normal children, a certain percentage of monotones inevitably would be found. It had to be recognized that there was no more possibility of developing an appreciation of music in a deaf monotone than there would be in attempting the same thing with a normal child who is a monotone.

Thus the field had to be narrowed to a few children of select talent. Out of the twelve in the Lansing group, four were found with definite musical potentialities. One youngster, in the space of a 45-minute classroom period, gave a remarkable demonstration of the possibilities of individual expression. He was provided with a drum and a pair of timpani sticks. With these he beat out a perfect rhythmic pattern to the music of an orchestra he could not see, and could only "hear" through his ability to translate the vibrations in his earphones into a meaning of his own. Subsequently three other children of the class attained this same accomplishment.

An attempt to teach these children pitch presented much greater difficulties to the experimenters. Pitch, unlike rhythm, cannot be felt, and children deaf from birth have had no previous experience which would aid them.

It will have been noted that practically all deaf persons who have been taught to speak create their speech sounds on a relatively level monotone. The commonly accepted way to teach deaf children the vibrations of speech and the use of the vocal organs is to require them to place their hands

on the instructor's throat while observing the movements of her mouth and lips, which they then try to duplicate. While the sense of inflection can hardly be developed in this manner, the child undoubtedly is conscious of variations of intensity in the vibrations he feels in this method of instruction.

This offered the experimenters their first clue in an ingenious approach to the difficult problem of pitch. They reasoned that since changes in pitch are involved in changes of intensity, a previous pitch experience of the deaf child would have to be the necessary starting point. The child could utilize the known pitch experience as a basis of comparison with other pitches yet to be learned, and thus start a chain of discriminatory reactions.

It was observed that the normal monotone pitch used in speech was approximately that of middle "C." And while not all deaf children spoke at exactly middle "C," once their speaking pitch was determined, no great difficulty presented itself in this slight departure from the norm.

The experimenters next determined that the oboe was the instrument best suited to sound the middle "C" into the headphones of the deaf children. First, because of its natural intensity and, secondly, because the oboe tone is particularly hard and penetrant, the vibrations of its double reed can almost be felt.

Each child was given ample opportunity to familiarize himself with this vibration and to compare it with that produced by his own speaking voice. A pitch five tones higher was then played by the oboist and frequently alternated with the original middle "C." The child was then taught that the difference in vibrations registered through his earphones between these two pitches was caused by the second pitch being "higher" than the first. A pitch five tones lower than the original was then played, with a corresponding explanation to the class.

Upon subsequent playing of these three pitches, without indicating to the class which one was being sounded, several immediately were able to differentiate the three. Not all responded with the same alacrity, but the slower ones were enabled to achieve uniformly good results after several trials.

From this point it was possible to decrease the intervals, and thus sharpen the pupil's sense of discrimination. During these tests no child was asked to sing back the pitch he heard.

After a certain amount of proficiency had been achieved, each pupil was asked to reproduce in actual pitch the vibrations coming to him through his earphones. The first note, of course, was the middle "C," and, because of the association of this note with the speaking voice, all the pupils immediately sang the note back true to pitch.

But the real thrill was to come. When the note was changed to "E," a major third higher, one pupil on first trial sang the tone back in pitch, and others followed after three or four attempts. Other notes were then tried with the same results.

An unescapable conclusion from these experiments was the fact that deaf children can readily be trained to react to pitch changes. The attainment of proper reactions to such sound qualities means for them the opening of a new world in the experience of hearing.

While it is not the purpose here to outline the wider pedagogic principles suggested by these preliminary experiments, from a musician's standpoint the following possibilities and future prospects would seem to be implied:

1. If a deaf child can but react to a very narrow range of pitch differences, he can be taught to speak with the same natural voice inflections used by a person with normal hearing.

2. If these experiments could be carried on as part of a daily classroom procedure, it should be possible to develop the musical potentialities of the more gifted ones to a state closely bordering that of those with normal hearing. In this connection, since the use of orchestras would not be practicable in many cases, it has been found that amplified phonograph records would serve the purpose of the experiments equally well.

3. If time could be taken to develop and associate note reading along with an established course of music for deaf children, permanent results of great value might be gained.

Effective Study

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AT MANY schools for the deaf and in many private homes the evening study hour is often thought of as more or less of a necessary nuisance. It should be the most pleasant and most profitable hour of the day. If teachers do not make it what it should be, they are simply failing in their duty and the blame should not be passed on to the pupils.

As long as boys and girls are in school their job is studying; it is their principal business; it should also be their hobby. If teachers take pains to help their pupils to master the art of study, they may expect better grades and accomplish more than hitherto.

It should be realized that proper study is one of the conditions of knowledge, and the ultimate success or failure of a pupil may depend more upon this than on any other one thing. So let us give our best thought to the study mastery problem.

Every teacher notes that some pupils make much better and faster progress than others. Every school has plenty of both types of pupils. It will be noted that the one who knows how to study, the pupil who is able to concentrate, is the one who makes best progress. In practically every case the learner's progress can be measured by his ability to study.

In classrooms where a small number of pupils come in for a short period daily, it is possible to have more or less flexible rules, though it is generally conceded that a few uniform rules for all classrooms help maintain the morale of the school. When there are 40 or more teachers in a school it is only natural that they will have different ideas about discipline. It is also natural that the pupil will become confused in his endeavors to conform when one teacher allows him to go through the drawers of his desk and another teacher condemns the practice.

In a large study room where a teacher looks after from 75 to 100 pupils, it is quite a different problem. For example,

recently a teacher on duty made a report stating that seven boys had no lessons to study. Several wanted to leave the room for a drink of water. Investigation proved that all seven boys really had lessons to study. Several had forgotten their books; the others simply did not care to study. It is rarely true that a pupil has no lesson to study, or that he has nothing to do as we often hear it said. He can always review old lessons or read ahead. Deaf pupils are almost without exception far behind their hearing brothers and sisters in the matter of reading and they should always have a book on hand to read during spare moments. Those far enough advanced to understand the language might profit from carrying with them a copy of the popular *Reader's Digest*. Practically all pupils have access to a good library and teachers should take it upon themselves to see that their students select and read books within their comprehension.

Most teachers have had experiences similar to those just related. Sometimes the study period is worse, sometimes it is not so bad. What is done about it? Usually nothing. No one cares to take the initiative. What should be done about it? A set of uniform study hour rules should be formulated by a committee of teachers. After these rules have been devised to meet the special needs of the institution and approved by the principal and superintendent, they should be posted in the study room and thoroughly explained by the principal. The reasons for the rules should be explained and when the pupils see that the rules are made for THEIR benefit, the teachers on duty should have little difficulty in enforcing them.

Whether the evening study period is a quiet period, a study period, or a thinking period, there is no question but that there should be absolute quiet. There should be no talking, asking questions, gesturing, or leaving one's seat. All preparations for the period can and should be made before the hour. Surely it is not asking too much that a pupil be absolutely quiet one hour a day, six days a week. Let us help him form this "quiet habit"; it will be worth much to him.

It may seem unreasonable to refuse to help a pupil during

study hour. The writer has tried helping and not helping and has seen the matter discussed pro and con at teachers' meetings a number of times. When a teacher moves about the room, a few pupils invariably take advantage of the turned back and annoy others. With a large number, one must consider the majority, not one or two. Most pupils have or can secure dictionaries. The dictionary habit is a good habit and pupils should look up words rather than ask the teacher.

The ideal and logical way of keeping study hour is for the teacher on duty to sit on a raised platform. This method is followed in many schools.

Herewith is submitted a set of rules for effective study. Local conditions vary, but these suggestions will be found helpful and the alert teacher will have no trouble in adjusting the suggestions to her special needs.

1. Keep in good physical condition.
2. Attend to, remove or treat, physical defects that often handicap mental activity. such as defective eyesight, defective teeth, adenoids, or obstructive nasal breathing.
3. See that the external conditions of work, such as light, temperature, humidity, clothing, chair, desk, etc., are favorable to study.
4. Form a place-study habit.
5. Form a time-study habit.
6. When possible, prepare the advance assignment in a given subject directly after the day's recitation in it.
7. Begin work promptly.
8. Take on the attitude of attention.
9. Work intensely while at work; concentrate.
10. Do not let intense application become fluster or worry.
11. Work with the intent to learn and to remember.
12. Seek a motive, or better, several motives.
13. Get rid of the idea that you are working for the teacher.
14. Don't apply for help until you have to.
15. Have a clear notion of the aim.
16. Before beginning the advance work, review rapidly the previous lesson.

17. Make a rapid preliminary survey of the assigned material.
18. Find out by trial whether you succeed better by beginning with the hardest or with the easiest task when you are confronted with several tasks of unequal difficulty.
19. In general, use in your studying the form of activity that will later be demanded when the material is used.
20. Give most time and attention to the weak points in your knowledge and technique.
21. Carry the learning of all important items beyond the point necessary for immediate recall.
22. You must daily pass judgment as to the degree of importance of items that are brought before you, and lay special stress on the permanent fixing of those items that are vital and fundamental.
23. When you interrupt work, stop at a natural break, and leave a cue for quick resumption. Use a book mark.
24. Form the habit of mentally reviewing every paragraph as soon as you have read it.
25. Whenever you desire to master material that is extensive and complex, make an outline of it. If you also wish to retain this material, commit this outline to memory. Many extemporaneous speakers use this method.

Use of Radium in Prevention of Deafness

I. S. F.

THE leading article in the *Journal of the American Medical Association* for February 18, 1939, "The Prevention of Deafness," a report from the Otological Research Laboratory of the Johns Hopkins University School of Medicine by Drs. J. S. Crowe and John W. Baylor, tells of experiments that may have far-reaching effects in the great problem of alleviation of deafness.

During the past fifteen years the Otological Research Laboratory has accumulated practically 15,000 records of tests of hearing, including every known type of deafness (using a special audiometer with a tone range from 32 to 16,384 double vibrations), and from a study of these records the investigators became convinced that hearing deficiency for high tones is widespread in children as well as in adults and that this type of auditory loss, with good hearing for low tones remaining, suggested a condition other than the customarily expected "inner ear or nerve lesion." Continued clinical-pathologic study and the observation that a number of children recovered hearing for high tones after removal of tonsils and adenoids seemed to strengthen this belief. The fact that in some children this recovery of high frequency hearing did not occur after operation for enlarged tonsils and adenoids led the investigators to search for a cause.

This cause they found—after systematic examination of the upper air passages, nasopharynx and eustachian tubes—in an overgrowth of lymphoid tissue on the lateral and posterior walls of the pharynx, a condition known as "granular pharyngitis," occurring frequently after tonsil and adenoid removal in children and in some adults. It seems that during childhood the lymphoid tissue in the throat areas increases in size when subjected to infection and spreads to surrounding regions of mucous membrane usually free from it. This over-

growth often becomes an obstruction to the pharyngeal openings of the eustachian tubes, and induces a hypersecretion of mucus to further irritate and impair the function of the tubes and middle ears.

At first this obstruction impairs hearing for the frequencies between 10,000 and 16,000 double vibrations. The child so affected may be able to continue with normal activities since the range between 250 and 3,000 double vibrations, the middle of the scale, suffices for ordinary speech. But the continued encroachment of the lymphoid nodules affects one octave after another inward toward the lower end of the scale, eventually involving the speech range. This insidious seizure thus damages the hearing apparatus long before it is detected. As the process involves the inner recesses, surgical effort to remove the obstructing lymphoid tissue is not possible.

It is at this point that the Johns Hopkins investigators, recalling that Dr. H. Heineke at Leipzig in 1905 showed that lymphoid tissue responds more readily to irradiation than does adjacent body tissue and bone, turned to use of radium and roentgen rays. The assumption was that the correct application of roentgen rays or radium, while not destroying or totally removing lymphoid tissue, will reduce it in size and for a time prevent its increase. For the past ten years, then, all available cases of hypertrophied lymphoid tissue around the eustachian types were subjected at the Otological Laboratory to ray treatment through portals near the angle of the jaw and to radium treatment by means of an applicator passing along the floor of the nose and placed under visual control by the operator.

The exact manner of application and directions for dosage of both rays and radium are described by Drs. Crowe and Baylor in their report. Audiograms taken after successive treatments indicate the method of irradiation of hyperplastic lymphoid tissue in and around the openings to the eustachian tubes appreciably lifts the hearing level toward the line of normal function.

From the results they have attained, the authors sum up their advice in this manner: Inasmuch as liability of lym-

phoid infection and overgrowth is particularly high during childhood, between the ages of five and ten years, it is extremely important that protective measures be taken in this period so as to prevent impairment of the hearing processes from being carried into the adult years. This means especial attention to diet, clothing, digestion, amount of sleep, fresh air and freedom from undue exposure. Removal of tonsils and adenoids should be followed by nasopharyngoscope examination to determine whether there is lymphoid obstruction of the eustachian tubes. This in turn should be followed by periodic radium and ray treatment to maintain normal function of the tubes. This procedure should be continued until the individual is well out of the childhood period of acute lymphoid infection susceptibilty.

The following case history, quoted by permission of the editors of the *Journal,* illustrates the typical procedure.

Case 5.—J. H., a boy, had increasing deafness, which made it impossible for him to keep up with his class at school, and frequent colds and mouth breathing, and the school physician advised his parents to have his tonsils and adenoids removed. This was done, but very inadequately, in the spring of 1937. During the next year the symptoms all became worse. His hearing was so poor that the school authorities transferred him to a special class for handicapped children, where he was taught lip-reading. We first saw him in June 1938 and found that his tonsils had been partially removed, that the pharyngeal orifices of both eustachian tubes were completely obscured with nodules of lymphoid tissue and that the tympanic membranes were intact but markedly retracted. He was almost totally deaf (chart 7, June 1938). He failed to hear the high tones by air conduction at the maximum intensity of the audiometer or a 512 double vibration steel fork at maximum intensity by bone conduction. The observations were typical of severe inner ear deafness.

The remaining tonsil and adenoid tissue was removed, together with the hypertrophied lymphoid nodules on the posterior and lateral walls of the pharynx. Later the lymphoid tissue in and around the eustachian tubes was treated with radium. An applicator containing 147 millicuries was passed along the floor of the nose and held over the eustachian orifices for fifteen minutes on each side, a dose equivalent to 2.2 gram minutes of radium. The ears were not inflated at any time. Within a week the hearing began to improve, and when the second audiometer examination was made eighteen days after the first test his hearing was found to be practically normal on both sides for air and bone conduction. At our request the patient's mother brought him back for an examination in November 1938, just five months after the operation and irradiation. During this short period he had been transformed from a dull, listless, almost totally deaf child who had been in a lip-reading class for nearly a year to a bright, alert, healthy looking boy with good hearing in both ears. (Chart 7, November 1938.) At the beginning of the school year, in September, he was put back into a class of children with normal hearing and is doing

good work. At the first examination he did not hear the higher tones even at the maximum intensity of the audiometer or the monochord, and heard nothing by bone conduction. The improvement shown by the second examination has been maintained and extended, particularly for bone-conducted sounds. We can offer no explanation

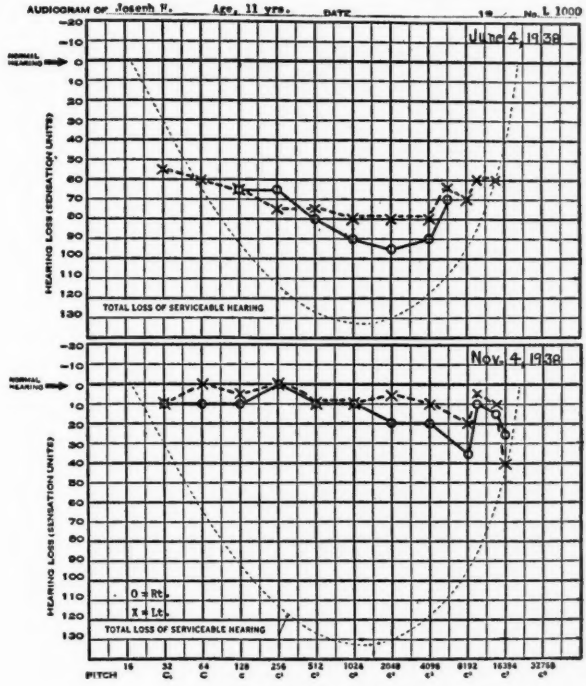
AUDIOGRAM OF Joseph H. Age, 11 yrs. DATE 19 No. L 1000
June 4, 1938
Nov. 4, 1938
HEARING LOSS (SENSATION UNITS)
TOTAL LOSS OF SERVICEABLE HEARING
O = Rt.
X = Lt.
PITCH

CHART 7 (CASE 5)

of the latter phenomenon. The only objective finding to explain it is the disappearance of the lymphoid tissue in and around the pharyngeal orifice of the eustachian tubes. The only adults in whom we have seen a comparable improvement in hearing for air and bone conduction had Ménière's disease. In these patients the eustachian tubes and middle ears were normal and the improvement was spontaneous and not the result of any form of treatment.

This case emphasizes the necessity for a revision of diagnostic methods for differentiating middle and inner ear lesions and proves that in children an apparently hopeless deafness may be cured.

Finally, the writers conclude that the application of the care and methods of treatment suggested in their report may well result in a reduction by 50 per cent in the number of deaf adults.

Summer School Opportunities for Teachers of the Deaf

THE coming summer will offer many opportunities for special study by instructors of the deaf. The courses available will be given at centers of recognized standing in different sections of the United States.

THE 1939 ASSOCIATION SUMMER SCHOOL

In co-operation with the University of California, at Berkeley, the American Association to Promote the Teaching of Speech to the Deaf will hold its regular summer school, June 26-August 4, 1939, following immediately upon the meeting of the Convention of American Instructors of the Deaf. This should be a convenient arrangement by which teachers may attend both meetings. An added attraction will be the International Golden Gate Exposition at San Francisco.

The general prerequisite for registration at the summer school is at least one year of special training in the instruction of the deaf or at least one year as a teacher of the deaf.

Registration will be Saturday morning, June 24, and Monday, June 26. The tuition fee for the course will be $35.00, plus an additional Association courses fee of $5.00. The maximum credit a student may obtain during the session under Association control is six semester hours. Enrollment in any of the courses is subject to the approval of the instructor in charge.

The program will consist of the following courses:

Language Fundamentals for Deaf Children.—Methods of teaching vocabulary, sentence structure and language principles, with special emphasis on the following: Stimulation of ideas through lip-reading, composition work, correction of errors in English common to the deaf, and application of the general principles of education and psychology to the teaching of language in schools for the deaf. Two units.

Josephine F. Quinn, Principal, primary and intermediate departments, Minnesota School.

English for the Deaf in Advanced Grades.—General principles and modern methods of developing constructive and creative work in the various forms of composition; discussion and criticism of compositions written by deaf children; diagnosis of errors and methods of correction; appreciation and study of literature; methods of teaching the fundamentals of grammar. Two units.

Marietta Rector Vinson, Teacher of language in the advanced department, California School.

Lip-Reading for Deaf Children.—Presentation of basic principles of lip-reading through discussion and planned observation. Practice exercises and the correlation of such exercises with classroom subjects. Procedures in keeping the lip-reading vocabulary parallel with the reading vocabulary, and demonstrations of auxiliary approaches to lip-reading. Discussion of recent developments in the field of research. Two units.

Mary E. Numbers, Teacher-in-charge, Clarke School.

Hearing Aids as Educational Tools in Schools for the Deaf.—A course designed to emphasize the fact that hearing aids in schools for the deaf are not fads, frills, or a new subject to be taught, but useful educational tools, which, properly applied, provide help in speech correction, in lip-reading, in language and in emotional adjustment. Two units.

Miss Numbers.

Speech for the Deaf: Formative.—Methods of speech development. International Phonetics transcription leading to ear training, diagnostic ability and the fundamental phonetic principles underlying the vowel and consonant charts. Formation and development of elementary sounds—consonant combinations, breath stops, word and sentence stress. The use of charts and diagrams. Correlation of speech with language. Two units.

Edna Long Wolf, Supervising teacher, primary department, California School.

Speech for the Deaf: Corrective.—Causes of types of defects, corrective methods and suggestions as to prevention. Examination, diagnosis of difficulties, and use of exercises for

correction. Voice production, tone quality, breath control, pitch and resonance. Two units.

Alice C. Chapin, M.A., Principal, Speech Correction School, Los Angeles.

NOTE: The final week of the above course will be given by Sara Stinchfield Hawk, Ph.D., President-elect of the American Speech Correction Association, and lecturer in psychology and speech pathology at the University of California.

Principles of Hearing, Hearing Tests and Hearing Aids.—Fundamental principles of sound; the nature of hearing; the testing of hearing with pure tones and speech sounds; interpretation of test results; hearing aids: requirements, prescription and use (air and bone conduction, individual and group). Two units.

Norman A. Watson, Ph.D., Instructor in the department of physics in the University of California at Los Angeles.

Audiometry and Hearing Aids: Practicum.—Round table discussions and demonstrations of apparatus and methods for the testing of hearing and the use of hearing aids; value and limitations of testing apparatus and aids; substitutes; responsibility for proper use of testing apparatus and aids. Two units. Dr. Watson.

Living costs in Berkeley are not immoderate. Room accommodation for the Convention Meeting and the Summer School session may be had at International House, one of the most beautiful buildings in Berkeley, where the rates, without meals, are from $5 to $7 a week, or at approved living quarters nearby. Applications for accommodations at International House for the period of the Convention should be addressed to Mr. Marshall S. Hester, California School for the Deaf, Berkeley. Applications for accommodations during the summer school should be addressed "Admissions Secretary," International House, Berkeley, California.

SUMMER SCHOOL FOR DEAF TEACHERS

At the suggestion of Principal E. A. Stevenson of the California School, the University of California, Berkeley, has arranged for the enrollment of deaf instructors in its 1939 Summer Session beginning June 26 and ending August 4. An

interpreter will be provided in any course where as many as ten or more deaf teachers enroll.

The tuition fee will be $35.00, which will permit registration for as many as three courses. Two semester hours of credit will be allowed for each course.

Living quarters may be secured at International House, Berkeley, on the University campus, or in nearby approved places. Rates range from $29 to $42 for the period of the session.

A general session catalogue may be obtained by writing to the Dean of Summer Session, University of California, Berkeley California. Those who are interested in attending are urged to write to Mr. Michael Lapides, California School for the Deaf, Berkeley, indicating likely choice of courses. This information is necessary so that advance provision may be made for interpreters.

The following courses, many of special interest to vocational teachers, will be among those offered: Introduction to Educational Psychology; Growth and Development of Children; Remedial Reading on the High School Level; Objective Tests and Measurements; The Exceptional Child; Psychology of Elementary School Subjects; Individual Tests in Guidance; The Integrative Curriculum in the Elementary School; Reading and Literature in the Elementary School; Industrial Arts in the Elementary School; Vocational Education; Construction of Vocational Curricula; Vocational Guidance; Co-operative and Apprentice Education; Methods of Teaching Technical Subjects; Supervision of Vocational Education.

St. Mary's School and University of Buffalo

St. Mary's School for the Deaf and the University of Buffalo offer, as part of their Co-operative Program in the Preparation of Teachers of the Deaf, the following courses for the Summer Session beginning July 5, 1939:

Practicum—Teaching of the Deaf.—Classes of elementary school children will be available for demonstration and for supervised student teaching. Instruction will be given in Voice and Speech Development, Methods and Activity

Work. The work in Methods will include the Belgian Method of teaching reading. Credit: Six semester hours.

Registration for advanced work using the Practicum as a point of departure may be arranged separately in the courses of

Methods of Teaching the Deaf.—Credit: Two semester hours.

Voice and Speech Development.—Credit: Two semester hours.

Psychology of the Handicapped.—Problems in the psychology of the handicapped, including lectures, discussion, and demonstrations of representative cases. Credit: Two semester hours.

Mental, Social and Vocational Adjustment of the Deaf.—Problems in adjustment of handicapped children to their environment—diagnosis, causes, and remedial measures. Credit: Two semester hours.

Lip-Reading. (A three-weeks course).—Credit: One semester hour.

Problems in the Education of the Deaf.—Individual or group study of selected problems in the field may be arranged for qualified students with the consent of the instructor. Credit: To be arranged.

This co-operative program is approved by the New York State Department of Education, Division of Teacher Education and Certification, and by the Conference of Executives of American Schools for the Deaf.

The faculty will include such well known educators of the deaf as Miss Enfield Joiner and Miss Lulu M. Bruce.

Columbia University

Teachers College, Columbia University, is offering this summer, July 5 to August 11, a session of Advanced Courses in the Education of the Deaf, planned for the needs of persons who have had at least one year's experience or training in the education of the deaf or hard of hearing. These courses will include

Language Development for the Deaf in Primary and

Lower Intermediate Grades, Miss Mildred A. Groht, two semester-hour credits, July 5-24.

Methods of Teaching English in the Upper Intermediate and Advanced Grades in Schools for the Deaf, Miss Groht, two semester-hour credits, July 25-August 11.

Elementary Voice and Speech Development for the Deaf, Miss Mary C. New, two semester-hour credits, July 5-24.

Advanced Course in Speech Correction for the Deaf, Dr. C. B. Hudgins, two semester-hour credits, July 25-August 11.

Curriculum Construction for the Deaf, I. S. Fusfeld, two semester-hour credits, July 25-August 11.

The Utilization of Residual Hearing in the Deaf, Clarence D. O'Connor and others, two semester-hour credits, July 5-24.

Practicum in the Education of the Deaf, Dr. H. Taylor and others, two semester-hour credits.

To supplement these special courses, the Department in the Education of the Handicapped, Teachers College, will also offer a program of related courses in the general field of the handicapped.

A Craft School

The Craft School of Ripon College, Ripon, Wisconsin, offers a three-semester-hour series of courses in Handicraft over a four-weeks period this summer. The courses of instruction include projects in leatherwork, burgess sheet, metal work, basketry, spongex, linoleum block printing, plastics, braiding and knotting, etching, beadcraft, woodcarving, clay and pottery, weaving, cork craft, paper craft, photography, design. A matriculation fee of $15 will be charged for credit work, and the basic fee for the four-weeks course will be $60. The rates for room and board at the college will be $1.25 per day, although students may room and board outside. Materials and tools are furnished by the school, but students are charged for the materials used in their own projects.

The school authorities state a member of the faculty is acquainted with the sign language, and in the 1938 summer

session two deaf teachers enrolled. The school will be glad to send a catalogue on request.

Michigan State Normal College, Ypsilanti

Through its Department of Special Education, Michigan State Normal College at Ypsilanti, is offering feature courses for experienced teachers of the deaf and hard of hearing in the Summer Session, June 26 to August 4, 1939. These courses, each providing four term hours of credit, and their instructors, include:

Speech-Reading I, Miss Ann Bunger.

Speech-Reading II, Miss Bunger.

Techniques in the Use of Hearing Aids, Sherman K. Smith, voice scientist.

Fundamentals of Voice Production in the Deaf and Hard-of-Hearing Child, S. K. Smith.

Phonation and Speech Correction Problems of the Deaf, S. K. Smith.

Principles of Teaching Deaf Children, W. J. Finch, Michigan School for the Deaf.

The Teaching of Speech, W. J. Finch.

Essentials of Language Development, Miss Edith Fitzgerald, founder of the "Fitzgerald Method."

Straight Language, Miss Fitzgerald.

Phonetics, Professor F. B. McKay.

Principles of Seeing and Hearing, Dr. H. L. Smith.

For Michigan residents, tuition and other fees will be $13.50; for non-Michigan residents, $17.50. Room accommodations for the Summer Session need not exceed $15 to $18, board $30 to $42. The total expenses need not be in excess of $63 to $91. Further information may be obtained by addressing Professor C. M. Elliott, director of special education, Michigan State Normal College, Ypsilanti, Mich.

Miscellaneous

I. S. F.

Room Arrangements for the Convention at Berkeley.—Plans have been made to provide housing accommodation for a large number of visitors to the meeting of the Convention of American Instructors of the Deaf at Berkeley, California, June 18-23, at the California School for the Deaf.

Members will be housed at the School for the Deaf, at famed International House, at the School for the Blind (adjoining the School for the Deaf) and at nearby hotels.

Reservation for accommodation in school dormitories will be made in the order of application. A deposit of one dollar must be made in order to secure a reservation. No deposit will be refunded after May 15. As all housing facilities will be taxed by visitors to the Golden Gate International Exposition, reservations for the convention should be made early.

A convention meal ticket will cost $8.50. It will provide for fourteen meals, which will be served in the school dining room beginning Sunday night, June 18, through Friday noon, June 23, but NOT INCLUDING the evening meal on the night when the convention banquet is to be held. The banquet will be held in the school dining room and will cost $1.25. If the banquet ticket is purchased at the time the meal ticket is purchased, the two will cost $9.25, thus effecting a saving of fifty cents. For accommodations in school dormitories and at International House write to Mr. Marshall S. Hester, California School for the Deaf, Berkeley, California, stating the accommodations desired, giving a second choice and enclosing one dollar deposit. Arrangements can be made to reserve one room for four women (or for three men) if the persons involved will apply for reservations in the same letter and a deposit for each person is enclosed.

Rooms in the dormitories may be occupied after 12 noon

Sunday, June 18, and must be vacated by 9 A.M. Saturday, June 24. Reservations for rooms not paid for by 7 P.M. Monday, June 19, will be cancelled and the rooms will be rented to someone else. There are no rooms for couples.

Accommodations	*June 18-June 23*
3 to 6 beds in a room	$4 for each person
2 beds and private bath (Women only)	$6 for each person
Suite for 4 persons—connecting bath (Women only)	$6 for each person
Private room—one bed—no bath (Men only)	$6 for each person

International House (four tenths of a mile from the School for the Deaf) will house convention guests at $2 a night. All rooms are single rooms without bath. Bathrooms are conveniently located on each floor. There is no special rate for the convention. Application for reservations at International House (for the Convention only) should be made to Mr. Marshall S. Hester, California School for the Deaf; one dollar deposit should be inclosed.

Those who plan to attend both the Convention and the Association Summer School at the University of California may apply for a room in International House for the duration of the Convention and the Summer School for a rate of approximately seventy-five cents a night. For such accommodations one should write to the Admissions Secretary, International House, Berkeley, California.

Three of the five hotels near the School for the Deaf are already booked for the entire month of June. If hotel accommodations are desired reservations should be made immediately.

Hotel Whitecotton, Shattuck Avenue, Berkeley. One and four tenths miles from the School for the Deaf. Reservations will be taken until May 15, while rooms are available. Requests for reservations should be accompanied by a five-dollar deposit.

Rooms, without bath, single, $2 per day; $12 per week
Rooms, without bath, double, $3 per day; $18 per week
Rooms, with bath, single, $2.50-$3 per day; $15-$18 per week
Rooms, with bath, double, $3.50-$4 per day; $21-$24 per week
Rooms with twin beds and bath, $4-$4.50-$5 per day

Durant Hotel, Durant and Bowditch Street, six tenths of a mile from the School for the Deaf. Reservations will be taken until May 15, while rooms are available.

Single room, with bath, $3 per day
Double bed, with bath, $4 per day
Twin beds, and bath, $5 per day
Single, no bath, $2 per day
Double bed, no bath, $3 per day

Correction.—By error in the list of American Instructors of the Deaf in the January ANNALS, a number of instructors in St. Mary's School for the Deaf were not properly credited with their degrees. Correction is here glady made in these cases,

Sister Maura, B.S. (Supervising, primary).
Sister M. Amabilis, B.S. (primary).
Sister Jane Catherine, B.S. (primary).
Sister M. Hubert, B.S. (high school).
Miss Ursula Semenza, B.A. (primary).

A number of these instructors are also members of the University of Buffalo staff in the program for training teachers of the deaf in co-operation with St. Mary's School.

Certification.—The interest in certification under authority of the Conference of Executives of American Schools for the Deaf continues unlessened. A total of 943 have submitted applications, the last group being the following instructors:

Elizabeth Brown Avery, North Carolina School.
Alice L. Crampton, New Jersey School.
Mildred F. De Arman, Arkansas School.
Harley Daniel Drake, Gallaudet College.
Frances Bertha Eads, Arkansas School.
Evelyn Gwendolyn Gillies, Mackay Institute.
Elizabeth H. Harris, New Jersey School.
John Wesley Haynes, Jr., Alabama School.
Ura Mae Johnston, Nebraska School.
Bernice Florence McCartney, Mackay Institute.
Anna Mellinger, Arizona School.
Leander Mitton, Mackay Institute.
Sarah May Mowrey, New Jersey School.

Bernice Beadle Palmer, Arkansas School.
Alice B. Rhodes, Texas School.
Mary Florence Skehan, Alabama School.
Mrs. John F. Thomason, Alabama School.
Mrs. Arthur Fulkerson Toole, Alabama School.
Dorothy Allen Turner, Northern New York School.
Ida Caroline Wilcox, South Dakota School.
Clementine Grace Young, Denver (Colo.) Day-School.
Richard Theodore Youngers, South Dakota School.

A Loss to the Horace Mann School.—From the Horace Mann School for the Deaf comes word of the loss of a greatly valued teacher. Miss Jane J. Wood, a member of the school staff for the last twenty years, died on January 24, 1939.

Miss Wood received her education in the Public Schools of Boston, and was graduated from the Boston Normal School in 1890. She was appointed as assistant in the Lowell District in 1890. In 1912 she was assigned to Special Class teaching under the direction of Miss Ada M. Fitts. In 1918 Miss Wood was appointed assistant in the Horace Mann School for the Deaf. Having reached the age of retirement, she was planning to retire from the service in June, 1939.

During her years of teaching Miss Wood endeared herself to her pupils and their parents. Her life was spent in the service of little children. She truly loved them and gave them the greatest of sympathy and understanding.

During this last year it was an effort for her to come to school, but the love of the little deaf children and the fellowship of her friends, the teachers, helped her to continue to the end.

The faculty of the Horace Mann School will long remember her gentle and kindly presence and her influence will remain to point the way to still finer things.

A Young Deaf Poet.—A poem written by a young deaf man was adjudged the best in the Seventh Annual Poetry Contest, sponsored by the poetry group of the Washington Branch of the Association of University Women, in which the contestants were students from seven colleges and universities in and near the city of Washington. The winning

contribution, "Ulysses Remembers," an expressive double sonnet, was submitted by Mr. Rex Lowman, a member of the Junior Class at Gallaudet College. Mr. Lowman, who is twenty years old, lost his hearing at the age of four, and entered Gallaudet College from the Arkansas School.

The prize-winning poem is as follows:

ULYSSES REMEMBERS

When this gold autumn evening passes with
The moving verge of half the shadowed world,
I shall forget how green sea tendrils curled
Across the prow; I shall forget the kith
Of all these voyages, and though the stake
Be Helen's breast, no Iliums shall blaze
Before me or behind; though Circe's gaze
May follow, like the vessel's silver wake,
Until at last I land, I shall forget
All, all of these and press yet on for home
While still the trade-winds blow, while still the foam
Breaks from the bow, as though a cestus met,
Below the keel, green seas' upsurging crest
And held the ship fast to the water's breast.

This evening only did I see the bare
Black branches of a tree against the sky,
Like the tall spars of vessels where they lie
Beyond a rocky headland, and the far
Hills of my homeland came to mind again
As I had left them twenty years before,
When they looked down upon a crowded shore
And saw white sails against the sea winds strain.
I am returned, not with the fleets of Greece,
But lonely and alone, Penelope,
From the dark Sirens' savage minstrelsy,
Seeking the dim, autumnal wraith of peace,
Like that in blue waves lifting tranquilly,
Or in the starkness of that barren tree.

This marks the third occasion in these annual undergraduate contests that a student of Gallaudet College has been awarded first prize, not to mention the number of times they have gained second and third prizes and places of honorable mention. (See ANNALS, March 1933, p. 179, and March 1934, p. 179-181.)

Needs of the School Child with Defective Hearing.—Angelo Patri, noted writer on child psychology and pedagogy, in one of his recent syndicated columns in discussion of the needs of the handicapped child, gave the following

sympathetic description of the plight of the school child with failing hearing. It appeared in the Washington *Evening Star*, December 9, 1938.

"My little daughter is in the seventh grade. Her teacher says she is able to do the work, but she has to be prodded constantly to get her to attend. She sits and looks into space. She is a good child and never gives me any trouble. Last year she had to have an operation for mastoid, but is now quite recovered."

When a child has had a mastoid operation one should be on the watch for poor hearing. Sometimes it is destroyed by the operation, sometimes it results in what one might call "delayed hearing." The child does not hear as quickly as others do and the teacher does not wait, or the opportunity to respond passes.

When a child has dull hearing much of what goes on in the classroom passes over his head. He does not know what people are saying. He hears most of what is said by those close to him if they speak clearly, but he cannot hear what is said by those behind him. And remember that in school he is not supposed to turn about and look at those who are talking. You can see that he is severely handicapped in the classroom.

Because he loses some of the work each day he is soon hopelessly behind in the class. His marks are bad, his work is poor, and his attention is elsewhere. He day-dreams. What else can he do? He cannot hear effectively; he cannot work because he cannot hear, so what is he to do? He has to take refuge in his thoughts. His difficulty is not his inattention, but his poor hearing. It is necessary to attend to his hearing, not his lack of attention. He will attend when he hears. And he will learn.

Such children ought to have a careful examination by the ear specialist every three months. They should be placed close to the teacher, and the teacher should make a point of talking directly to them and make them hear. It is helpful to appoint a friendly, helpful child to assist the handicapped child. And most important, such a child needs five minutes or so of personal attention from the teacher every day to keep him well up in his work. There are few such children, so the burden should not be too heavy for the grade teacher.

If the child is very hard of hearing, he should have the privilege of going to a special teacher for grade instruction, two to three hours of the school day, and of working with his classmates in the common classroom the remainder of the time.

My experience with all sorts of handicapped children does not inspire me to suggest special schools or classes for them. I found we could do better with such children by scattering them through the grades and gathering them again for special, personal help from an especially-trained, thoroughly skilled teacher. Segregating them made them feel isolated and doomed, subjected them to the gibes of unthinking classmates, made them thoroughly miserable. They have rights, and they certainly have great needs. School can help them a great deal.

X-Ray and Radium Treatment for Deafness.—An Associated Press report in the Washington *Post*, February 11, 1939 refers to a statement from the otological laboratories

of Johns Hopkins University Medical School by Dr. J. S. Crowe, Dr. Stacy R. Guild and Dr. John Ward Baylor to the effect that certain forms of childhood deafness following colds and infections will yield to X-ray and radium treatment. A fuller statement concerning this appears on pages 160-163 of this issue of the ANNALS.

School Objectives.—An expression of the fundamentals toward which the school for the deaf is moving is always a timely contribution. For this reason, the prospectus as outlined for the Iowa School by its superintendent, Mr. Lloyd E. Berg, in the *Iowa Hawkeye,* January 15, 1939, is instructive, particularly because it embodies the cardinal aims of present-day education.

It is well that we re-emphasize, from time to time, the objective toward which we, as a school organization, are working.

The object of the Iowa School for the Deaf is to promote a thorough elementary and secondary education for children between the ages of seven and nineteen who are too deaf to be properly instructed in the public schools of the state.

This objective presupposes that the child's education shall be as individual in character as the school is reasonably able to afford. This means that each child, entrusted to the care of the school, shall receive training suitable to and commensurate with his capabilities.

The final test of the school's effectiveness shall be found in how well the child assumes the responsibilities of citizenship which are rightfully his. Specifically, our object is:

(1) To develop boys and girls who are self-supporting.
(2) To teach boys and girls how to conduct a successful home life.
(3) To teach boys and girls fundamental skills involved in normal living.
(4) To teach an intelligent use of leisure time.
(5) To teach social concepts consistent with good citizenship.
(6) To produce boys and girls healthy in mind, body and spirit.
(7) To provide opportunities for qualified pupils to obtain a higher education.

The Pennsylvania Conservation-of-Hearing Program.—The State of Pennsylvania, having recently instituted a widespread conservation-of-hearing program for its school children under direction of the Department of Public Instruction—previously referred to in the ANNALS for September 1938, pages 372-373—is finding the effort a positive need, as this statement in *Public Education,* Monthly Bulletin of the Department, February 1939, indicates.

Correct Hearing Defects

Margaret P. Durkin
Adviser, Division of Health and Physical Education

Free Test

The Department of Public Instruction is now engaged in a vast program to test the hearing of all school children of the Commonwealth by means of modern audiometric equipment. Forty-seven audiometers for group testing and five for individual testing are being used in this constructive work. More than seventy demonstrations of the techniques of audiometric testing have been given throughout the state by the department before groups comprising school superintendents, principals, physicians, health and physical education instructors, teachers, and nurses.

Cured or Prevented

At these demonstrations, the constructive purposes for which the hearing tests are given have been explained. In general, this new service to the people of Pennsylvania has been initiated to detect incipient cases of hearing loss in children in order that later serious hearing handicaps may be prevented.

Necessary educational adjustments are being made in all such cases to fit the needs of the individual child. These adjustments include one, or a combination of as many, of the following as the child may require: Advantageous seating in the classroom, lip-reading instruction, voice and speech practice, special class education, vocational counseling.

250,000 Tested

In less than a half year, the hearing of approximately 250,000 children has been tested with the audiometers. Reports of the findings of these tests received by the Department of Public Instruction record that the audiometric testing has discovered many unsuspected cases of hearing loss. These cases were immediately reported for remedial treatment and education adjustment. In many other instances, hearing defects have been discovered in pupils whose backwardness and discomfort had been ascribed wholly to mental deficiency.

State-Wide Service

During 1938-1939 clinics for the individual testing of the hearing of children will be set up in five different areas throughout the state. The protection of hearing by early detection of hearing loss and necessary education adjustments for all cases of subnormal hearing are now the direct legally imposed responsibility of every school administrator.

Meeting of the American Academy of Ophthalmology and Otolaryngology.—The American Academy of Ophthalmology and Otolaryngology held its Forty-third Annual Session in Washington, D.C., October 9 to 14, 1938, in the course of which a number of topics of concern to the school for the deaf were considered. Among them was a meeting devoted to discussion of hearing aids, and courses of lectures on The Functional Tests of Hearing (by Dr. C. C. Bunch of St.

Louis); Speech Education for the Deaf (by Dr. Max A. Goldstein); and Audiometers and Hearing Aids, Their Scope, Limitations and Practical Application (by Dr. Horace Newhart of Minneapolis).

In his lectures Dr. Bunch, associate director of Central Institute for the Deaf, pointed out the great diversity in testing procedure commonly employed by examiners in testing hearing. Use of a time measure, dependence upon the distance factor, tuning forks of different size and construction all cause variations in interpretation of the results, so that a common understanding of measured hearing loss is not possible. Nor has the use of the audiometer eliminated these difficulties. According to Dr. Bunch,

> Each audiometer must have its own normal curve for comparison with that of the patient. If the normal curves for all audiometers were identical, comparisons would be easy and understandable. However, one examiner tests his patients in a noisy place and has his own "normal" curve while another uses a soundproof room or "silence chamber" and has an entirely different "normal." More than this, the units of intensity may be different in two audiometers. These differences all interfere with the free interpretation of audiograms.

Dr. Goldstein devoted his lecture to a discussion of the principles involved and the methods used in the development of speech.

College Opportunities for Blind or Deaf Students in Pennsylvania.—Dr. T. Ernest Newland, chief of the division of special education in the Department of Public Instruction of Pennsylvania, describes in the *Public Education Bulletin* for October 1938 the opportunities made available for deserving blind or deaf students of that State to obtain a college education.

> Blind or deaf young men and women in Pennsylvania, who show promise of successful occupational careers, are afforded an opportunity for a college education by the Commonwealth through a biennial appropriation to the Department of Public Instruction. For the coming school year a total of $9,135 has been allocated for this use. Through this fund 30 students, 24 of whom are blind and six deaf, will be able to begin or continue their education in the colleges of the Commonwealth and neighboring states.
>
> Twenty-one of the group have been in colleges from one to four years. The remaining nine will enter college in September of the current school year.
>
> These students, consisting of fifteen young men and fifteen young women, are distributed among fifteen colleges and universities, most

of which are in Pennsylvania. Five are attending Temple, three are attending the University of Pennsylvania, four are attending the University of Pittsburgh, two are at Slippery Rock, four are attending Gallaudet College, two are attending Geneva, two are attending State College, and one each in Drexel, Pierce, Lehigh, Philadelphia College of Osteopathy, Thiel, Eastman School of Music, Carnegie Institute, Alfred. Two of the colleges attended by these handicapped youth are out of the State, the Eastman School of Music being in New York and Gallaudet College in Washington, D.C.

More than a half dozen different vocations have attracted these deaf and blind students. Twelve are preparing for teaching; three anticipate careers in the printing trade; the others are planning to become lawyers, merchants, osteopaths, social workers, psychologists, and ministers.

The amount of aid for each student varies according to related circumstances. Usually, the amount increases as the student progresses through the levels of his college career and demonstrates his ability to profit by the higher preparation. Likewise, the type of work pursued by the student is a factor in determining the amount of money needed for his college education. Moreover, some of the students have resources of their own which are available for financing in part their college careers.

Calcutta School's Pupil-Record System.—The school for the deaf in Calcutta, India, has apparently solved the problem of how to record the necessary information concerning pupils at time of admission. This is accomplished with the aid of a stapled case-history folder, enclosing six pages approximately nine by eleven inches, for each child. It contains four sections: A and B, to be filled in by the father or guardian (34 questions pertaining to the child's history and present condition); C, medical examination report; D, the principal's examination report; and E, the class teacher's report (to be submitted at the end of the year).

Evening Classes for the Adult Deaf.—An effort is to be made in the school system of the city of Chicago to provide evening instruction for the adult deaf. The plan is described in this letter published in the *Deaf-Mutes' Journal,* September 22, 1938:

September 14, 1938.

Mr. White, assistant superintendent in charge of night schools, Chicago Board of Education, is going to start several evening classes for the deaf (and the deafened) in lip-reading and speech and language, which we would like to have advertised among all the adult groups whom you know or can come in contact with. The former has been done for many years, but the latter is a new experiment, and we are especially anxious that this aspect be emphasized; the speech of the deaf tends to deteriorate when out of school and with the lengthening years, and we wish this phase to be emphasized as we

feel that many adults would be interested in taking this opportunity if they knew about it. As it is being done by request, we are all the more anxious for it to be taken advantage of by those who would be most likely to benefit by it.

If further information is desired, please drop a card to Miss Rose Stuart, Lane Technical High School, Addison and Western Avenues, Chicago, Illinois, who can tell you about the time and place. At least one class will be opened next week; there will be one on each of the north, south and west sides of the city if there is sufficient demand.

Hoping that you can help us "spread the news"—which we consider very good news—we are yours for better opportunities for the deaf.

Sincerely,
LINDA K. MILLER
DORA A. ROSENTHAL
Teachers in charge of the deaf oral classes
Washburne Trade School, Chicago, Ill.

Under supervision of the state board of education a class for the adult deaf is being conducted in Newark, N.J. The class has an average attendance of from twelve to fifteen, in language, civics and current events; on Wednesday night of each week the session is devoted to a forum discussion for the deaf. Mr. David A. Davidowitz, a graduate of Gallaudet College, has been both organizer and instructor of this work.

An Act to Create a State Division for the Deaf.—That the special needs of the deaf are gradually being recognized is evidenced by the fact that the State of Michigan has joined the few states, notably North Carolina and Minnesota, that already have such provision, by establishing a year ago a Division of the Deaf and Deafened in the State Department of Labor and Industry. The text of the law is as follows:

Act No. 72, Public Acts of 1937.

AN ACT TO PROTECT THE DEAF AND DEAFENED.

AN ACT to protect the deaf and deafened; and to create within the department of labor and industry a division to be known as the "division of the deaf and deafened"; and to prescribe its powers and duties.

The People of the State of Michigan enact:

Section 1. There shall be created in the department of labor and industry a division to be devoted to the interests of the deaf and deafened.

Director; Appointment, Qualifications, Authority. Sec. 2. The commissioner of labor shall appoint a competent person to have charge of such division of the deaf and deafened, who shall be fully conversant with the sign language of the deaf as generally accepted, and who shall have been a resident of the state for at least five years

prior to such appointment; such appointee to be known as "director of the division of the deaf and deafened," and to be subject to the regular rules and regulations of the department of labor and industry.

Director, Duties; Deputy, Duties; Reports. Sec. 3. The director of said division shall collect and tabulate statistics pertaining to the deaf and deafened, their employment and welfare; shall ascertain what trades or occupations are most suitable for them; shall endeavor to create new fields of employment to which they may adapt themselves, and to place them in such various lines of employment; may investigate any, and all, charges of discrimination against them by certain employers, industries, corporations or organizations with whom they may seek employment and combat all unfair discrimination; and shall use his best efforts for the general welfare of all the deaf and deafened within the state.

There shall be a deputy director who shall serve in the capacity of "general field agent" in order to properly contact industrial executives, factory proprietors, and employers of labor in general. He shall conduct a state-wide survey or census of the deaf and deafened of all ages and degrees of deafness at stated regular intervals; he shall collect and disseminate statistics and other information relative to deafness as an insurance risk; he shall endeavor to obtain and compile statistics, facts and data covering the condition of labor, employment and education of the deaf and deafened in other states and countries with a view to profiting by the experience of others confronted with like problems.

The division shall contact and seek cooperation with all state departments, divisions, officers and state agencies and minor governmental bodies to the end that deaf and deafened persons may be employed in such capacities in the government of the state, or any subdivision thereof, as they may fill as efficiently as other persons. He shall make such reports and recommendations to his superior as may be required by law, or otherwise, and issue such reports in pamphlet form, or otherwise, as may be necessary or desirable to advance the best interests of the division and the deaf and deafened people of the state in general.

Assistants, Appointments, Compensation. Sec. 4. The director shall, with the approval of the commissioner of labor, appoint the necessary assistants to properly conduct the offices of his division, whose salaries shall be determined and fixed by the department of labor and industry.

Compensation, Expenses. Sec. 5. The director and assistants of the division shall receive such compensation as shall be determined by the department of labor and industry, and such actual and necessary expenses as shall be incurred in the performance of their official duties, to be paid in the same manner as the compensation and expenses of other state employees are paid. The director is also authorized to incur such other expenses as shall be necessary to carry out the provisions of this act.

Approved June 11, 1937.

In pursuance of the objectives of the above Act, a director of the new division was chosen in the person of Mr. Jay Cooke Howard, for many years prominent in the affairs of the deaf, both national and state. This choice assures a high degree of promise of results to be attained. Mr. Howard will maintain his office in Lansing, capital of the state.

Extension Activities of a School for the Deaf.—The Minnesota School has established a series of correspondence courses for its graduates, and at present 26 former pupils are taking such work by mail in reading and arithmetic. The purpose of this innovation is to provide at the same time practical training in subjects of direct use to those enrolled and a means of continuing leisure-time study. The venture is still in the experiment stage, and, if the prospect warrants, additional courses will be offered. Two members of the school staff have set aside one class period a day to this correspondence work. No charge is made for enrollment.

The courses offered at present are described in the Minnesota School *Companion,* November 24, 1938, as follows:

> The course in reading is designed to give the students the kind of practice which will enable them better to understand and to appreciate the things they read, and to develop in them the habit of leisure time reading for pleasure. The course will include reading selections from popular literature, both magazines and books.
>
> The arithmetic course offers a review of the fundamental processes of arithmetic needed in practical problems and a study of the practical arithmetic which students are most likely to need in measurement, in common financial transactions, family budgets, etc. It will include some of the modern "consumer education."

The same school, during the holiday season, December 26-31, 1938, held short courses in bee culture and turkey raising, under direction of qualified experts, for the benefit of adult deaf persons of the state. Approximately 25 men and women attended. As this experiment has promise in it of great possibilities, the plan as explained by Mr. Ralph W. Farrar, vocational principal, in the *Companion* for November 24, 1938, is here given.

> This is the first short course we have offered at school and we are doing it because we feel it is a course that will prove of practical value to the deaf men who are interested in getting the necessary information to keep bees either as a side line or to develop it into a full-time occupation as a means of making a living.
>
> Men acquainted with bee culture tell us that work with bees does not require hearing and deaf people can make bees as profitable as do the many hearing people who find this work both interesting and profitable. It is work that one does without supervision, and without any great investment of money. Most of the work is done during the pleasant months of the year. Men handy with woodworking tools can spend the winter months making necessary equipment for the following summer's production season.
>
> The course will be offered at no expense to the men who take it. The school will furnish board, room, and instruction as well as all

equipment necessary to take the course with the exception of a text that will cost approximately 50 cents. Mr. N. B. Ellingson, a man trained at the State University in bee culture and a practical bee keeper, will be the instructor.

Defective Hearing Among Drafted Men.—According to a recent Federal publication, The Problems of a Changing Population (Report of the Committee on Population Problems to the National Resources Committee, May 1938), a total of 7.69 per 1,000 of the men drafted for army service during 1917-1918, the period of American participation in the World War, was found to be "deaf and dumb, mute; deaf, or suffering from defective hearing," in the following proportions:

Deaf and dumb, mute	1.00 per 1,000 men
Deafness	1.22 per 1,000 men
Defective hearing	5.47 per 1,000 men

The ratios here specified included the findings by local boards and at camps, both for rejected and accepted men.

The study, which indicated the prevalence of diseases and defects among drafted men 21 to 30 years of age inclusive, sought to gain "some insight into the prevalence of handicaps of various sorts that affect the young men of this Nation, at the ages when they are beginning their life work and undertaking family responsibilities," that is, at the period of maximum physical vigor.

Digest of the Deaf.—A new illustrated monthly magazine, resembling in format the popular digest-type of magazine and taking its name after the same fashion, *Digest of the Deaf*, has recently made its appearance. Its declared policy is "to acquaint the great hearing public with the accomplishment and achievements of the deaf in the fields of art, science and industry," and for this purpose presents articles dealing with the education of the deaf, their place in society and their success in varied endeavor. The magazine is managed by a staff of deaf men and women and is published at Springfield, Mass. (Box 827). The editor in chief is Mr. Emerson Romero. The subscription is $3.00 a year, 25 cents a copy.

When present printing difficulties have been adjusted, the *Digest* staff hopes the periodical, publication of which

has been temporarily suspended, will make its scheduled appearances.

The New York Journal of the Deaf.—The old familiar *Deaf-Mutes' Journal,* beginning with the present school term, has had a new address, White Plains, New York, the new location of the New York School for the Deaf, where it is published. But with the first issue of the new year, January 5, in keeping with the spirit of the times, it has taken a new name; it is now the *New York Journal of the Deaf.*

The objectives and the excellence of this worthy publication remain the same, under the able ministration of its distinguished editor, Dr. Thomas Francis Fox. Its masthead still carries the familiar quotation: "There are more men ennobled by reading than by nature."

The Deaf as Automobile Drivers.—One of the feature articles in *Redbook Magazine,* issue of February 1939, called "It Always Happens to Somebody Else" is a careful summary, heightened by a great deal of statistical substantiation, of the hazards of carelessness on the automobile highway. The author is Mr. Joseph F. Dinneen. A special point of interest in the article is this paragraph referring to the ability of the deaf as auto drivers:

> In three years, a group of psychologists examined more than a quarter of a million drivers on roadways, in "crash chambers" and at laboratory steering wheels with instruments. They found out the trouble with some drivers; they considered that 1,400,000 of the country's twenty-eight million drivers are dangerous, and that half of the 1,400,000 probably will continue to create hazards on the roads; but that the other half could be cured of their dangerous habits by medical or psychiatric treatment—or by plain instruction, if they could be reached. They found out some queer things about drivers while they were about it: that a deaf driver, for instance, is likely to be the safest and most careful; that there are more accident repeaters among divorced and single persons than among the married; and that a Southern Negro, once warned, seldom repeats an automobile offence.

German Attitude Toward the Handicapped.—Lydia Van Hagan Van Zandt, prominent commentator on world affairs, in an article in the Washington *Sunday Star,* January 9, 1939, on social welfare as national policy in Germany, refers rather pointedly to the National Socialist principle of relief for the needy. According to her findings, Nazi welfare activity

is intended "to help the *potentially* useful members of the community and not to coddle the weak," since the prime objective is to strengthen the state.

As deaf persons, particularly the congenitally deaf, may be involved, it will be of interest to quote the following excerpt from the article:

> If our enthusiastic American visitors went behind the scenes of the National Socialist Welfare Organization's Berlin display, examined their work more than superficially and visited some of the activities as I did, they found that none of their agencies supply aid to those who were born with a permanent mental or physical deficiency which incapacitates them nor to those who have become permanently disabled, nor to any person not of "pure German blood."

Status of Hard-of-Hearing Children in Germany.—Part of a report from the Berlin correspondent of the *Journal of the American Medical Association,* in its issue of January 14, 1939, considers the status of schools for the hard of hearing in Germany. Although schools for the severely deaf have been under national regulation since 1911, there is no uniformity of regulation as yet for the education of hard-of-hearing children. A few municipalities have established special schools and classes for such children, providing for about 1,500 pupils. Limits within which these pupils can follow instruction in the classroom have been set at half a yard for the whispering voice and from three to four yards for the ordinary speaking voice. The estimated number of children with defective hearing (but not classed as profoundly deaf) is said to be five in every 1,000 children of school age, or about 40,000 within the German reich. From this it may be seen that the 1,500 pupils for whom special educational provision has been made represent but a small fraction of the numbers requiring aid.

A study by the National Health Bureau, recently released, deplores this apparent neglect to provide proper school facilities for these children, maintaining that since they do not belong in schools for really deaf children, special schools should be established for them. In such schools, it is recommended, no class should enroll more than fifteen pupils. The training of teachers for these schools should be similar to that of teachers of the deaf. A further recommendation is that training in handicrafts and draftsmanship should be part of the course.

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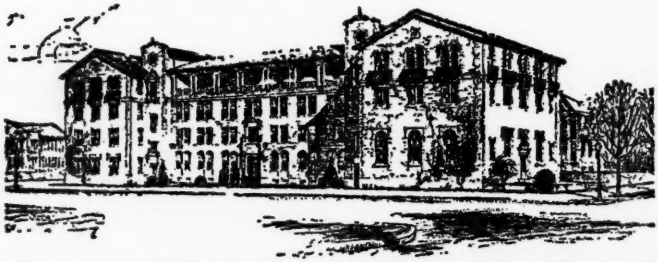

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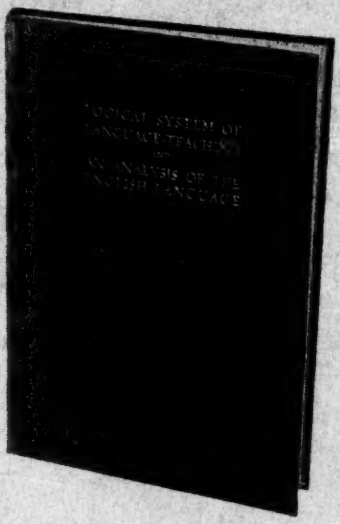

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